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Work Injuries in the United States During 1950

Bulletin No. 1098

UNITED STATES DEPARTMENT OF LABOR

Maurice J. Tobin, *Secretary*

BUREAU OF LABOR STATISTICS

Ewan Clague, *Commissioner*

Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., May 27, 1952.

The SECRETARY OF LABOR:

I have the honor to transmit a report on the occurrence of work injuries in the United States during 1950. Over 68,000 establishments with a total employment of about 11 million workers participated in the survey on which the report is based.

This bulletin, parts of which have appeared in the March 1951 and January 1952 issues of the Monthly Labor Review, was prepared by Frank S. McElroy and Robert S. Barker, of the Bureau's Branch of Industrial Hazards.

EWAN CLAGUE, *Commissioner.*

Hon. MAURICE J. TOBIN,
Secretary of Labor.

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ABSTRACT

Disabling work injuries totaled about 1,952,000 in 1950, 4 percent above the 1949 level. Production losses accruing from the 1950 injuries ultimately will amount to the equivalent of a year's full-time employment for over 700,000 workers. The greatest proportionate increases in injury volume occurred in manufacturing and construction. Injury-frequency rates generally were somewhat higher than in 1949, but the average severity of the injuries tended to be lower. Monthly frequency rates available for manufacturing indicate that the upturn in injuries began early in 1950 and that the upward trend was continuous to the end of the year. In December, the manufacturing industries were producing injuries at a rate much higher than the full-year average of 14.7 per million employee-hours worked.

Reflecting increased employment and somewhat higher injury-frequency rates in many industries, the volume of disabling work injuries [1] in the United States in 1950 rose about 4 percent above the total recorded in 1949. The 1950 total of 1,952,000 injuries, however, was below the 2,019,000 estimate for 1948 and was the second lowest figure since 1940.

Injury-frequency rates [2] generally tended to be somewhat higher in 1950 than in 1949, but this adverse aspect was tempered by a general decline in average injury severity. Most of the increase was in the volume of temporary injuries. The proportion of fatalities was substantially the same as in the previous year and the proportion of permanent impairments actually declined.

[1] A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any one or more days after the day of the injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational disease.

[2] The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked.

Estimates of Disabling Work Injuries

The total volume of disabling work injuries in 1950 was estimated by the Bureau of Labor Statistics [3] as 1,952,000—an increase of 82,000 over the 1949 estimate.

Approximately 15,500 persons died as a result of work injuries experienced during 1950. An additional 84,900 suffered some permanent disability, such as the amputation of a body part or the impairment of some function of the body. This latter group included about 1,600 cases in which the impairment was serious enough to incapacitate the injured persons for any gainful employment for the remainder of their lives. The bulk of the injuries (95 percent), however, resulted only in temporary disability which incapacitated

[3] These estimates of injury volume were prepared cooperatively by the Bureau of Labor Statistics and the National Safety Council. The basic estimates of the two organizations, therefore, are identical. Differences in the published figures represent variations in the rounding applied to the basic figures by the two organizations. These variations reflect primarily the National Safety Council's need for integrating the occupational estimates into totals for all types of accidental injuries, including injuries resulting from home, traffic, and public accidents, for which the Bureau does not prepare estimates.

the injured persons for one or more days, but from which they recovered without any permanent ill effects.

Approximately 40 million man-days were lost in 1950 as a result of injuries which occurred during the year. This is equivalent to the loss of all productive effort from 134,000 workers throughout the year. If additional allowance were made for the future effects of the deaths and permanent physical impairments, the total economic loss would amount to about 212 million man-days—or a year's full-time employment for about 706,000 workers.

Estimated number of disabling work injuries during 1950, by industry group

	All disabilities	Fatalities	Permanent disabilities	Temporary-total disabilities
All employed persons (except domestic servants) [1]				
All groups	1,952,000	15,500	[2] 84,900	1,851,600
Agriculture [3]	340,000	4,300	15,600	320,100
Mining and quarrying [4]	72,000	1,000	3,200	67,800
Construction [5]	205,000	2,300	8,500	194,200
Manufacturing [6]	426,000	2,600	21,700	401,700
Public utilities [5]	24,000	300	600	23,100
Trade [5]	335,000	1,500	8,100	325,400
Transportation [7]	177,000	1,300	9,800	165,900
Finance, service, government, and miscellaneous industries [5]	373,000	2,200	17,400	353,400
Employees only [1]				
All groups	1,483,000	11,100	65,900	1,406,000
Agriculture [3]	60,000	1,100	3,700	55,200
Mining and quarrying [4]	67,000	900	3,000	63,100
Construction [5]	159,000	1,800	6,600	150,600
Manufacturing [6]	419,000	2,500	21,400	395,100
Public utilities [5]	24,000	300	600	23,100
Trade [5]	268,000	1,200	6,500	260,300
Transportation [7]	155,000	1,200	8,700	145,100
Finance, service, government, and miscellaneous industries [5]	331,000	2,100	15,400	313,500

[1] Differences between injuries to all employed persons and injuries to employees represent injuries to self-employed and unpaid family workers.
[2] Includes approximately 1,600 permanent-total disabilities.
[3] The total number of injuries in agriculture is based on cross-section surveys made by the U. S. Department of Agriculture in 1947 and 1948. These are considered to be minimum figures; injuries experienced in performing chores are excluded, and there are some indications of under-reporting. The breakdown of agricultural injuries by extent of disabilities is based on other sources.
[4] Based largely on data of the U. S. Bureau of Mines, Department of the Interior.
[5] Based on small sample studies.
[6] Based on comprehensive survey.
[7] Data for railroads are based on Interstate Commerce Commission reports; data for other transportation are based on small sample surveys.

Increased employment and intensified activities in manufacturing and construction contributed to the increase of approximately 12 percent in the volume of work injuries in each of these industry classifications. In manufacturing, both employment and the average hours worked per week were higher in 1950 than in 1949. Together, these factors produced an increase of about 9 percent in the total volume of man-hours worked in manufacturing, representing a substantial rise in the exposure to industrial injury possibilities.

A similar situation existed in construction. Construction activities were at an all-time high during most of 1950. Increased employment resulted in more hours of exposure to work hazards, and the increased tempo of work tended to raise the injury rate.

The only major decrease in the number of work injuries occurred in public-utility operations. There was a slight reduction in telephone employment and a substantial drop in employment in the other communications industries. Most of the decrease in the volume of injuries, however, can be attributed to the improvement in injury-frequency rates recorded for most divisions of the public utility group.

Other industry groups showed little change or only minor increases in the number of injuries. Within the transportation group of industries, railroads had a modest decrease in work injuries. There was, however, a sufficient increase in injuries in other transportation activities to offset this decrease and result in a net increase for the entire group.

The mining industries as a group had a 3-percent increase in injuries despite a slight drop in the number of persons employed and a general improvement in the injury-frequency rates for most types of mining. The influence of these factors was more than balanced by an increase in the number of man-hours worked. Within the group, bituminous-coal mining did have a slight decrease in the number of injuries. Anthracite, metal, and nonmetallic mines and quarries each had an increase in injuries during 1950.

In trade, finance, service, government, and the miscellaneous industries, injuries increased moderately during 1950—paralleling in most instances changes in employment.

In agriculture an increase in mechanical hazards arising from more extensive use of farm machinery offset the drop in employment and held the volume of injuries at about the 1949 level.

Injury-Frequency Rates

Manufacturing.—Advance indications of a 1950 reversal in the down trend of manufacturing injury rates were substantiated by the final full-year averages. The final all-manufacturing fre-

quency rate for 1950 was 14.7, a rise of 1 percent from the 1949 average of 14.5.[4] This rise, although small in magnitude, contrasted sharply with the substantial declines recorded in the all-manufacturing rate during 1947, 1948, and 1949. (See chart 1.) Actually, however, the full-year average obscures the highly significant changes in injury experience which occurred during the year.

The monthly all-manufacturing injury-frequency rate showed a definite downward trend during most of 1949. This carried over into January 1950 when the rate was 14 percent below the January 1949 level. In each of the following 3 months the 1950 rate was lower than the 1949 rate for the corresponding month, but the differences were progressively reduced in each successive month. In May the 1950 rate moved above the 1949 level and continued to move higher through the rest of the year. In December the 1950 rate was 14 percent above the corresponding rate for 1949. This sharp shift from 14 percent below the 1949 level in January to 14 percent above the 1949 level in December is lost entirely in the comparison of the two full-year averages. (See chart 2.)

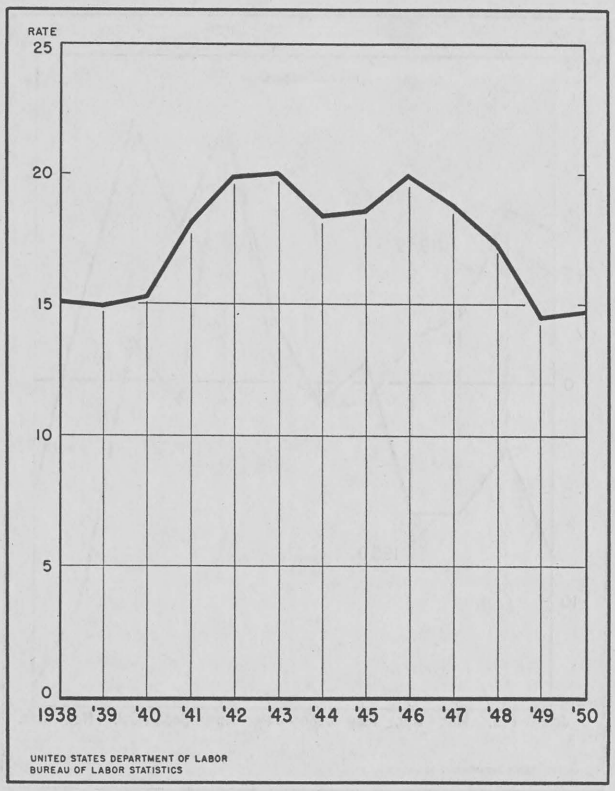
In general, the 1950 frequency rates for the major manufacturing industry groups were not significantly different from the corresponding 1949 rates. The most important changes in the group averages were: An increase from 17.5 in 1949 to 19.0 in 1950 for the fabricated metal products group; an increase from 11.6 to 13.3 for the miscellaneous manufacturing group; and a decrease from 9.4 to 8.3 in the frequency rate for the transportation equipment group.

A wider range of changes occurred in the rates for the individual manufacturing industries. Among the 164 industry frequency rates computed for 1950, there were 68 which, for all practical purposes, were unchanged from their 1949 levels; 34 were significantly lower than in 1949; and 62 were 1 or more frequency-rate points higher than in 1949. Only six manufacturing industries had 1950 frequency rates which were as much as five points higher than in 1949. (See table A, cols. 1 and 5.)

The greatest increase—from 36.4 disabling injuries per million employee-hours in 1949 to 50.3 in 1950—occurred in beehive coke oven operations. Average employment in this industry increased only slightly, but a sharp rise in the number of active plant-days during 1950 boosted the man-hour total 45 percent above the 1949 level. The volume of injuries, however, increased much more sharply, bringing the injury-frequency rate up 38 percent. In terms of production, the picture was somewhat more favorable inasmuch as total production rose more rapidly than the man-hours expended. Nevertheless, the injury rate expressed in terms of million tons of coke produced was 18 percent higher in 1950 than in 1949.

The other manufacturing industries in which outstanding injury-frequency rate increases occurred during 1950 were: Metal doors, sash, and frames, in which the rate rose from 21.0 in 1949 to 29.9 in 1950; nonferrous foundries, with a rise from 19.2 to 24.8; metal household furniture, where the rise was from 18.3 to 23.5; cold finished steel, which had an increase from 14.3 to 19.4; and planing mills, for which the increase was from 38.5 to 43.5.

Chart 1.—Injury-Frequency Rates in Manufacturing, 1938–50



[4] All 1949 rates quoted in this report are revised figures and may differ from the 1949 rates previously published in Bulletin No. 1025. See table A, p. 12, for a complete listing of the revised injury-frequency rates for 1949, and see Technical notes, p. 10, for a description of the revisions.

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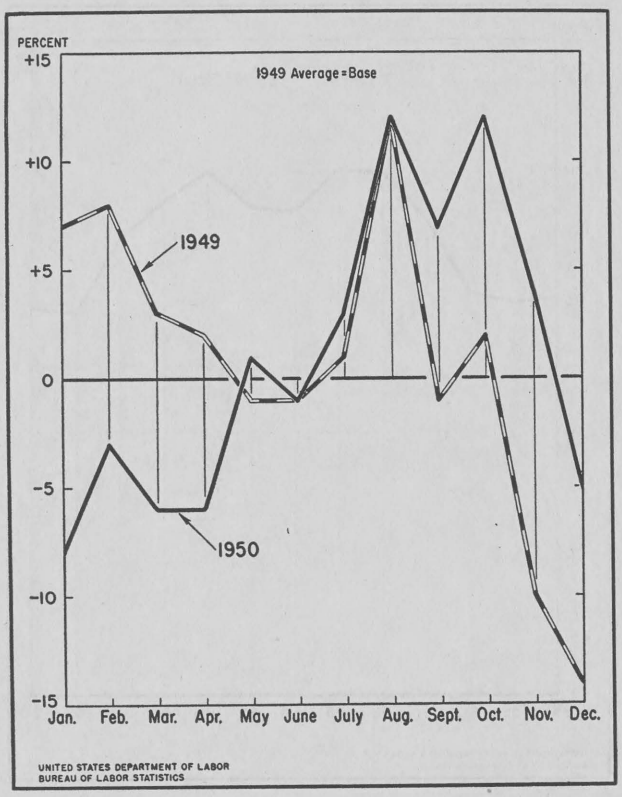
Chart 2.—Percent Change in Monthly Injury-Frequency Rates in Manufacturing, 1949-50



In contrast, some manufacturing industries succeeded in effecting sharp reductions in their 1950 injury-frequency rates. For wineries the rate dropped from 25.4 in 1949 to 19.8 in 1950; for elevators, escalators, and conveyors, it fell from 21.3 to 16.1; and for wood office furniture it came down from 27.4 to 22.2.

The general ranking of manufacturing industries, in terms of injury-frequency rates, during 1950 remained much the same as in previous years. The highest average for any of the industry groups was 49.8 disabling injuries per million employee-hours worked for the lumber and wood products group. (See chart 3.) The highest frequency rate for any individual manufacturing industry—96.5 for logging—was in this group and all of the other industries in the group had rates well above the all-manufacturing average.

The lowest of the industry-group averages was 6.2 for the ordnance group, followed by 6.6 for the apparel group, and 6.8 for the tobacco group. Some individual industries, however, held their frequency rates well below the best of the group averages. The most favorable industry rates were:

Industry	*Injury-frequency rates* 1949	1950
Synthetic fibers	3.0	2.1
Synthetic rubber	3.2	3.4
Explosives	1.4	3.8
Radio tubes	3.1	3.9
Aircraft	4.3	4.0
Electric lamps (bulbs)	3.7	4.0
Ophthalmic goods	5.6	4.8
Clothing, women's and children's	4.3	4.9

Nonmanufacturing.—As in manufacturing, injury-frequency rates for the nonmanufacturing industries (exclusive of mining) tended to be somewhat higher in 1950 than in 1949. Among the 52 individual industry classifications there were 21 rate increases and 13 decreases. Rates for the other 18 classifications varied by less than 1 frequency-rate point between the 2 years. (See table A, cols. 1 and 5.)

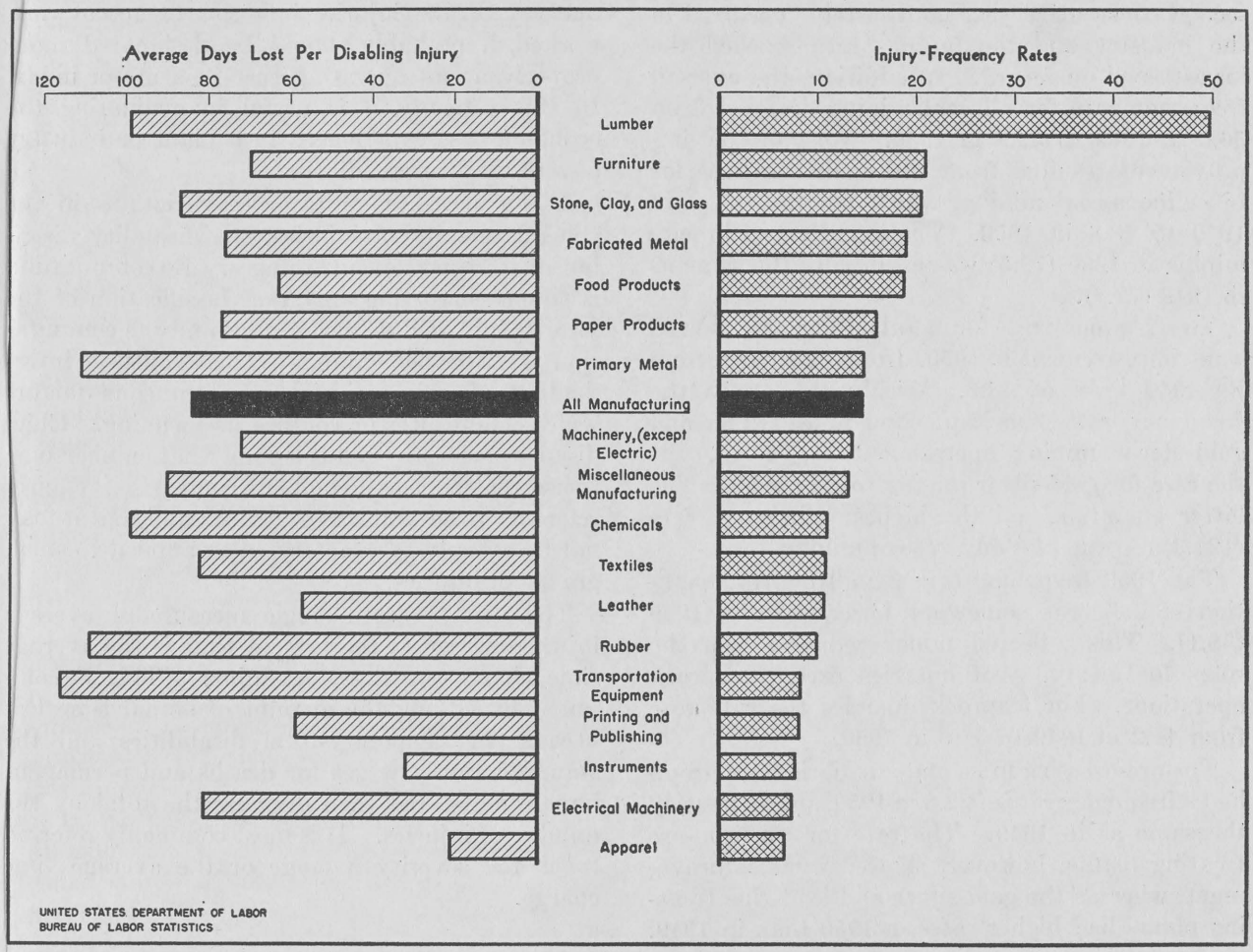
The average frequency rate for all construction operations advanced from 39.9 in 1949 to 41.0 in 1950. Sharp rises occurred in the rates for roofing and sheet-metal work, masonry and stonework, structural-steel erection and ornamental ironwork, and painting, paperhanging, and decorating. For general building contracting there was a moderate increase in injury frequency. On the other hand, the 1950 frequency rates for the installation and erection of building equipment, and for terrazzo, tile, marble, and mosaic work were lower than in 1949.

In the personal-services group the frequency rate for hotels rose from 13.5 in 1949 to 16.0 in 1950, and the rate for dry cleaning rose from 5.1 to 6.5.

Seven of the eleven trade classifications had significant increases in their frequency rates. The most important was a rise in the rate for filling stations from 4.8 in 1949 to 12.0 in 1950. The only improvement recorded in the group was in the rate for combination wholesale and retail trade establishments, which dropped from 16.5 to 13.6.

Electric and gas utilities both had lower frequency rates in 1950 than in 1949. Similarly, local bus operations and the integrated local transportation systems lowered their frequency rates in

Chart 3.—Injury-Frequency Rates and Severity Averages, Major Manufacturing Groups, 1950



1950. The frequency rate for streetcar operations, on the other hand, rose somewhat. Stevedoring, with a frequency rate of 59.4 for 1950, was again near the top among the high-rate industries. This rate was substantially lower than the rate shown for 1949, but the validity of this apparent improvement may be questioned because of changes in the establishments reporting for the 2 years. Comparisons based upon the records of identical establishments reporting in both years indicate that the frequency rate for stevedoring actually rose by about 3 percent in 1950. The apparent drop in the frequency rate for waterworks is also open to question for the same reason.

Mining and quarrying.—Although the injury-frequency rates for the mining [5] and allied industries remained relatively high, there were significant decreases in the rates for 13 of the 21 operating classifications for which the Bureau of Mines compiled figures. Five increases were recorded, all in the smaller segments of the group and exercising little influence upon the general average. (See table A, cols. 1 and 5.)

[5] In making injury rate comparisons between mining and other industries, one should bear in mind that the rates for mining are based upon the experience of only those employees engaged in the mining operations, and exclude office workers, whereas the rates for other industries include the man-hours and injury experience of office workers and others not exposed to actual operating hazards of the industry concerned.

In respect to work injuries, 1950 was a good year for coal mining in the United States. For the second consecutive year no disasters [6] occurred in the industry and the fatality rate reached the lowest level on record. In addition, the over-all frequency rate for all coal mining dropped from 56.0 in 1949 to 52.8 in 1950. Most of this improvement resulted from a drop in the rate for bituminous-coal mining, which fell from 52.6 in 1949 to 48.8 in 1950. The rate for anthracite mining in 1950 (72.5) was essentially the same as in 1949 (72.7).

The frequency rate for metal mining also showed some improvement in 1950, dropping to 45.6 from its 1949 level of 48.5. Within the group the frequency rates for iron, copper, lead-zinc, and gold-placer mining operations were down, but the rate for gold-silver mining rose in 1950. The latter operation had the highest frequency rate (121.3) recorded for any type of mining.

The 1950 frequency rate for all quarry operations (36.6) was somewhat lower than in 1949 (38.1). This reflected minor reductions in the rates for all types of quarries except traprock operations. For traprock quarries the rate rose from 44.2 in 1949 to 51.6 in 1950.

The ore-dressing mills and auxiliaries as a group had a frequency rate of 22.8 in 1950, approximately the same as in 1949. The rate for the iron-ore treating plants, however, showed some improvement, whereas the gold-silver and lead-zinc treating plants had higher rates in 1950 than in 1949.

Injury Severity

Although the injury-frequency rate is generally accepted as the most useful measure of injury experience, some measure of the relative severity of the injuries sustained is also recognized as essential for the complete evaluation of any injury record. The standard severity rate [7] has long been the yardstick most widely used for this purpose. In recent years, however, the significance of this rate has been seriously questioned. The principal criticisms have been that the severity of an injury cannot logically be related to the amount of time worked and that the method of computation makes it, in effect, merely a weighted frequency rate rather than a true measure of injury severity. Inasmuch as it expresses the total time charges, which in turn represent the economic consequences of the injuries in terms of actual time worked, it probably should be designated more properly as an operating cost measure or index. In this capacity it is useful in evaluating the economic loss experienced in a plant or industry as a result of work injuries.

As an accurate indicator of variations in the general severity of injuries, the disability distribution offers certain advantages. Its computation is simple, involving only the classification of the injuries into well-defined groups and the computation of simple percentages. This avoids the introduction of any artificial or extraneous factors which might alter or confuse its meaning. Chief disadvantages are that it is somewhat cumbersome to use, inasmuch as a complete comparison requires reference to several sets of figures, and that it may not be entirely satisfactory when applied to small groups of injuries.

The most favored single measure of average injury severity at the present time is the average time charge per disabling injury. This is computed by adding the amount of actual time lost because of temporary-total disabilities and the standard time charges for deaths and permanent impairments, and then dividing the total by the number of injuries. It is most commonly referred to as the severity average or the average time charge.

Manufacturing.—Injuries experienced in manufacturing tended, on the average, to be somewhat less severe than those experienced in 1949. Just why this occurred is a matter of question, inasmuch as many possible factors enter into the picture. The most encouraging interpretation probably is that intensified safety activities, which are most commonly directed at the control of the more serious hazards, were responsible. This possibility is supported by the declining ratio of permanent-partial impairments [8] in the 1950 record, but is

[6] The Bureau of Mines defines a mining disaster as any single mine accident which results in the death of five or more persons.

[7] The severity rate is the average number of days lost, because of disabling work injuries, per 1,000 employee-hours worked. The computation of days lost includes the use of standard time charges for fatalities and permanent disabilities as given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

[8] A permanent-partial disability consists of the complete loss in one accident of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof to any degree less than permanent-total disability. A permanent-total disability is an injury, other than death which permanently and totally incapacitates an employee from following any gainful occupation.

offset in some degree by the fact that the ratio of fatalities and permanent-total disabilities did not change from the 1949 level. A second possibility is that during the setting-up period at the beginning of an industrial expansion, manual operations loom disproportionately large and machine operations recede in importance until the expansion or change-over of facilities has been completed. This would account for the rise in temporary disabilities and the drop in the ratio of permanent impairments, and would throw some light upon the drop in the average time charge for permanent impairments and temporary disabilities. Another factor to be considered is the improvement in recent years in the medical procedures for the treatment of work injuries. Therefore, the decline in general injury severity apparent in 1950 may represent, at least in part, success on the part of the medical profession in minimizing the seriousness of work injuries. The decline in the average recovery time for temporary disabilities and the reduction in average time charges for permanent impairments lends credence to this possibility. In all probabilities, each of these factors contributed in some measure to the reduction in injury severity.

For manufacturing generally, the proportion of fatalities and permanent-total disabilities remained the same in 1950 as in 1949. The ratio of permanent-partial disabilities to the total volume of disabling injuries dropped slightly from 5.4 percent to 5.1 percent. (See table A, col. 11.) Of greater importance, the average time charge for permanent-partial disabilities dropped from 943 days per case in 1949 to 892 days in 1950, and the average recovery time for temporary disabilities dropped from 17 days per case to 16 days. As a result of these factors, the average time charge (or severity average) for all disabling injuries in manufacturing came down from 93 days per case in 1949 to 84 days in 1950. In the standard severity rate, this substantial reduction in injury severity is partially offset by the rise in injury frequency. Nevertheless, the standard severity rate (or economic loss index) for all manufacturing dropped from 1.4 days per 1,000 employee-hours worked in 1949 to 1.2 in 1950, representing, on the basis of 1950 operations, a saving of about 14 percent in lost time.

Thirteen of the 21 major groups of manufacturing industries had some reduction in their average time charge per injury during 1950, and in most instances these reductions brought about a reduction in the standard severity rate. Outstanding reductions were accomplished in the following groups: food industries, apparel, lumber, furniture, rubber, fabricated metals, and electrical machinery. In contrast, the tobacco, printing, and chemicals groups had substantial increases in their average time charges per disabling injury along with increases in their standard severity rates. (See table A, cols. 6 and 7.)

An interesting characteristic apparent in the injury severity comparisons is the accompaniment of a low injury-frequency rate by a high average severity. For example, the following are the manufacturing industries which had the highest average time charges per case in 1950:

	Average days charged per case	*Frequency rate*	*Severity rate*
Aircraft manufacture	280	4.0	0.9
Blast furnaces and steel mills	219	5.7	1.2
Industrial organic chemicals	193	4.8	1.1
Tires and inner tubes	187	5.6	1.0
Pumps and compressors	153	15.4	2.4

Four of these industries have very low frequency rates and average or better standard severity rates. The fifth, which had the lowest average time charge in the group, had a somewhat higher than average frequency rate and a substantially higher than average severity rate.

At the other end of the scale, the opposite relationship frequently exists. For example, the manufacturing industries with the lowest average time charges in 1950 are as follows:

	Average days charged per case	*Frequency rate*	*Severity rate*
Bottled soft drinks	13	26.7	0.4
Medical instruments and supplies	15	13.1	.2
Elevators, escalators, and conveyors	17	16.1	.4
Clothing, women's and children's	18	4.9	.1
Clothing, men's and boys'	18	6.4	.1
Metal coating and engraving	21	29.3	.7
Brooms and brushes	24	17.6	.4
Hats	24	18.2	.4
Envelopes	25	15.4	.4
Dairy products	26	17.8	.5
Cold-finished steel	26	19.4	.7
Miscellaneous food products	28	14.9	.6

All but 3 of the 12 industries in this group had higher than average frequency rates to offset their low average time charges.

In proportion to total employment, the logging industry probably experienced the greatest manpower losses in 1950 among all the manufacturing industries. In this industry, the proportion of fatalities and permanent-total disabilities was three times the all-manufacturing average. The proportion of permanent-partial disability cases was low, but the average time charge for these cases was double the average for all manufacturing. Similarly, the average recovery time for temporary disabilities in logging was well above the all-manufacturing level. The resulting average time charge of 129 days for each disabling injury in the industry, coupled with its high frequency rate, gave the industry a standard severity rate of 12.9, the highest recorded for any manufacturing industry. On the basis of an 8-hour day, this would represent a loss of about 10 percent of the total manpower available to the industry.

No other manufacturing industry had a severity rate which even approached the logging level. However, there were a number with rates warranting the designation of "very high." Among these were:

	Severity rate	*Average days charged per case*	*Frequency rate*
Planing mills	5.8	127	43.5
Integrated saw and planing mills	5.1	107	45.6
Sawmills	4.9	83	61.4
Sheet-metal work	3.4	138	26.8
Plywood mills	3.1	77	32.9
Miscellaneous nonmetallic mineral products	3.0	139	19.1
Fertilizers	3.0	126	23.8
Metal doors, sash, frame, and trim	3.0	80	29.9

Nonmanufacturing.—In most classifications of the business, personal, and educational services, and communications and trade, the injury severity rate tended to be relatively low in 1950. In all of these classifications the proportion of disabling injuries resulting in death or permanent impairment was comparatively small and in most instances the average recovery time for temporary disabilities was relatively short.

In the heat, light, and power; construction; and transportation classifications the proportion of permanent-partial impairments was generally lower than in manufacturing but the ratio of fatalities tended to be higher. As a result, the severity measures for some of these classifications were comparatively high, although none matched the highest levels reached in manufacturing.

In construction the most adverse severity record was for structural-steel erection and ornamental ironwork. The fatality rate in these operations was very high and permanent-partial disabilities were quite common. These factors were reflected in the high average time charge of 186 days per disabling injury. Coupled with the high frequency rate of 58.9, this gave the classification a standard severity rate of 11.0, indicating a manpower loss second only to that incurred in logging operations.

A similar combination of unfavorable factors gave the heavy construction (general contracting) classification an average time charge of 150 days per case and a severity rate of 6.4. A number of other construction classifications had average time charges exceeding 100 days per case, and nearly all had severity rates which substantially exceeded the average prevailing in manufacturing.

In the transportation group, stevedoring had an above-average time charge of 100 days per case and a quite high severity rate of 6.0. Trucking and hauling, and warehousing and storage also had relatively high severity rates, although the average time charges for their injuries were not particularly high.

A high ratio of fatalities resulted in a high average time charge of 172 days per case for the electric light and power industry. The low injury-frequency, however, held the severity rate down to 2.1.

Mining and quarrying.—In comparison with manufacturing, the ratio of fatalities in coal mining was quite high, but the ratio of permanent-partial disabilities was comparatively low. In bituminous-coal mining, the average time charge per disabling injury was 167 days and in anthracite mining it was 96 days. The bituminous-coal average may be characterized as quite high; the anthracite average is not exceptionally high. Because of the high frequency of injuries, however, the manpower losses in both branches of coal mining were very high. In bituminous-coal mining the loss averaged 8.1 days per 1,000 employee-hours worked and in anthracite mining it was 6.9 days.

Severity rates and average time charges were not available for the other mining classifications.

Fatalities, however, constituted 1.3 percent of all disabling injuries in metal mining; 1.7 percent in nonmetal mining; 0.8 percent in quarrying; and 0.9 percent in ore-dressing operations. Significantly, in cement quarries, which had the lowest frequency rate in the quarry group, the proportion of fatalities was unusually high (9.6 percent). Similarly, iron-ore dressing mills had the lowest frequency rate in their group, but 3.2 percent of their disabling injuries resulted in death.

APPENDIX

Technical Notes

All injury-rate data presented in this report were compiled according to the provisions of the American Standard Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

Definitions.—The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked.

A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any one or more days after the day of injury (including Sundays, days off, or plant shut-downs). The term "injury" includes occupational disease.

The severity rate is the average number of days lost, because of disabling work injuries, per 1,000 employee-hours worked. The computation of days lost includes the use of standard time charges for fatalities and permanent disabilities.

Workers covered.—Injury rates compiled by the Bureau of Labor Statistics include the experience of all classes of workers in each reporting establishment—production and related workers; force-account construction workers; and administrative, supervisory, sales, service, technical, professional, and office personnel.

Rates designated as having been compiled by the Bureau of Mines, U. S. Department of the Interior, include the experience of workers engaged in production, development, maintenance and repair work, and supervisory and technical personnel at the operation, but exclude office personnel and employees in stores or affiliated operations not directly connected with mining or refining operations.

Industry classifications.—The manufacturing classifications used in this report conform to the definitions of the 1945 edition of the Standard Industrial Classification Manual (vol. I), prepared by the Division of Statistical Standards of the United States Bureau of the Budget. Classifications used in previous reports were based upon the 1942 edition of this manual.

Nonmanufacturing classifications, except those used for construction operations, are based upon the 1942 edition of the manual as in previous years. The construction classifications follow the definitions of the 1949 edition of volume II.

Revisions.—Because of the change to more current industry definitions, which necessitated the reclassification of many reporting establishments, a considerable number of the 1950 injury rates are not strictly comparable with the rates shown for the same, or similar, industry titles in previous years. The major classification changes are shown in table F.

In addition, all reports in the sample were reviewed in the light of product and activity data newly available to the Bureau. On the basis of this review, a number of individual reports were reclassified. To provide a basis for comparison, all 1949 data were reprocessed on the new basis and revised frequency rates for 1949 are shown in table A for direct comparison with the 1950 rates. The degree of comparability between the revised 1949 rates and those previously published is also shown.

In retabulating the 1949 data, more current employment weights than those previously available were utilized. Use of the revised weights resulted in some change in most of the group averages and reduced the 1949 all-manufacturing frequency rate from the previously published figure of 15.0 to 14.5.

Tables

Table A shows the injury-frequency and severity rates, average time charges per case, and the disability distribution for individual industries and for industry groups for 1950. Revised injury-frequency rates for 1949 are also shown in this table. The group rates were computed by weighting the individual industry rates according to the total employment in each industry.

Chart 4.—Industrial Injury-Frequency Rates in Manufacturing, by Type of Disability, 1926–50

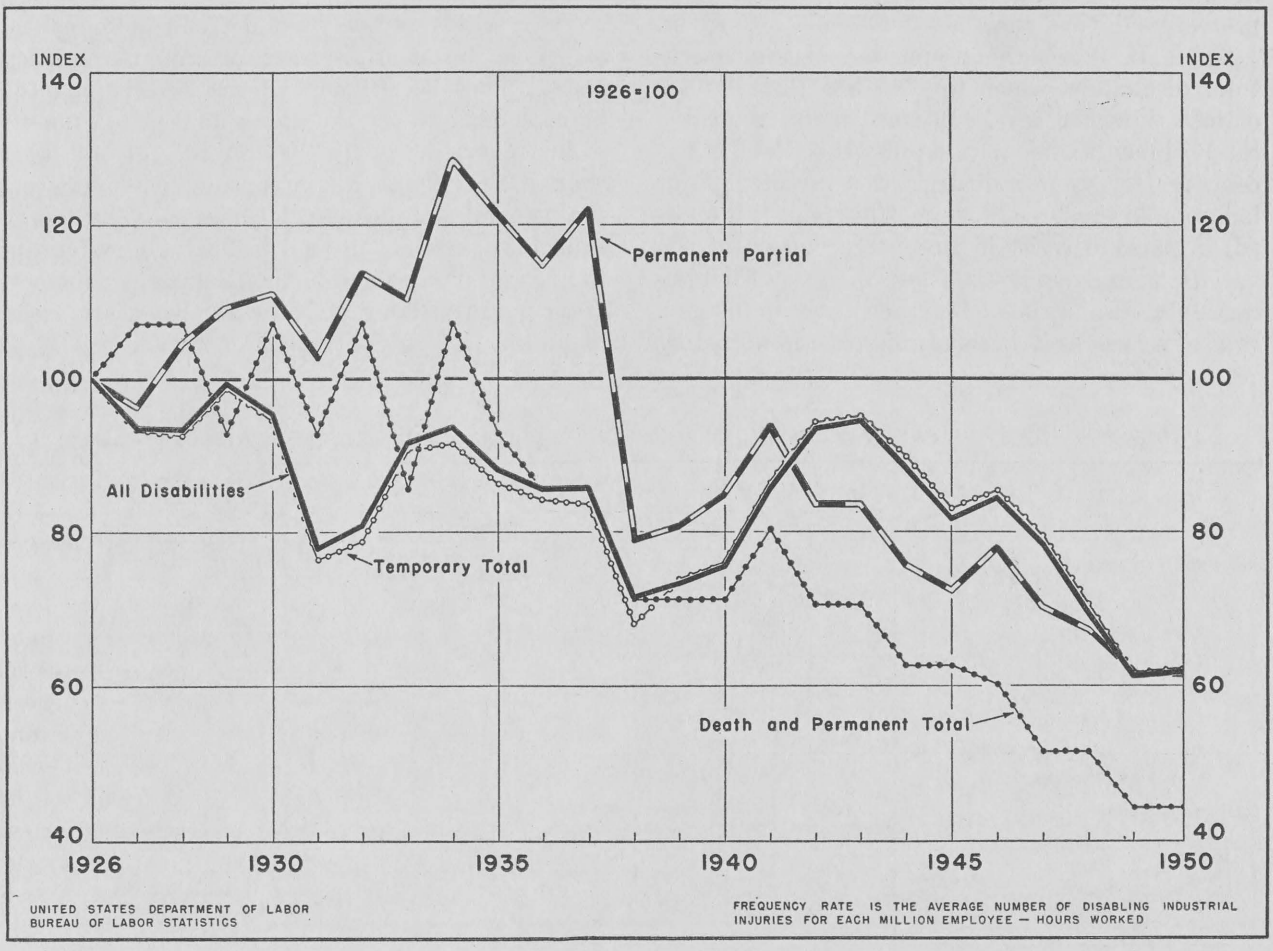


Table B shows changes in employment, hours worked, disabling injuries, and days lost for establishments which reported for both 1949 and 1950. The purpose of this table is to measure from year to year the safety accomplishments of establishments performing substantially identical operations over the 2-year period, by eliminating the effect of changes in the composition of each industry. It does not indicate the general injury experience of particular industries, which may be affected both by the prevailing hazards and by changes in the composition of the industry.

Table C shows in industry detail the percentage distribution of permanent-partial disabilities according to the part of body affected. This table serves, in part, to explain the variations in average days charged per case among the various industries. In interpreting the table, it should be borne in mind that the time charges for permanent injuries to the different parts of the body bear approximately the following relationship to each other:

1 finger (not thumb)	300 days
1 thumb	600 days
1 toe (not great toe)	150 days
1 great toe	300 days
1 hand	3,000 days
1 foot	2,400 days
1 arm, above elbow	4,500 days
1 arm, below elbow	3,600 days
1 leg, above knee	4,500 days
1 leg, below knee	3,000 days
1 eye	1,800 days

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Table C also presents some indications of the possibilities of reducing injuries in the various industries through greater use of certain personal protective devices such as safety shoes or goggles.

Table D shows the proportion of temporary-total disabilities which involve less than 4 days of lost time per case. Because many reporting establishments did not supply this detail, the coverage for some industries was insufficient for inclusion in this breakdown. This table is intended, in part, to assist in the interpretation of the variations in average time lost because of temporary-total disabilities among the various industries. It also serves as a basis of reference in adjusting compensable case data to an all-disabling injury basis for those States in which the waiting period is 3 days.

Table E shows the general trend of industrial safety in terms of indexes of injury-frequency rates. These yearly indexes are based upon the percent change in the rates of establishments which reported in both the current and preceding years. They should not be considered as indicating the general frequency-rate level at any given time because they do not reflect the effect of expansion or contraction in the number of operating plants. They do indicate the safety trend in plants having continuing operations.

TABLE A.—Injury rates [1] by industry, 1950 (with comparable injury-frequency rates for 1949)

Industry	1949 revised data [2]		1950 survey data									
							Average days lost or charged per case [4]			Percent of disabling injuries resulting in [4]—		
	Injury frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported [3]	Injury-frequency rates	Injury-severity rates [4]	All cases [5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Manufacturing												
Total manufacturing	[6] 14.5	(7)	36,530	8,607,151	[6] 14.7	[6] 1.2	84	892	16	0.4	5.1	94.5
Food and kindred products	[6] 19.7	(7)	4,442	566,304	[6] 18.9	[6] 1.2	63	1,187	14	.2	2.9	96.9
Meat products	23.1	(7)	795	141,911	21.7	1.4	38	989	11	.1	2.0	97.9
Dairy products	17.6	(7)	351	21,199	17.8	.5	26	1,225	14	----	1.0	99.0
Canning and preserving	20.8	(7)	433	69,900	22.8	1.6	67	1,213	15	.3	2.7	97.0
Grain-mill products	18.5	(7)	623	51,614	17.2	1.7	90	1,418	16	.3	3.9	95.8
Bakery products	14.8	(7)	739	76,904	13.9	1.5	103	1,079	16	.4	5.7	93.9
Sugar	27.0	(7)	104	26,610	26.4	1.4	57	1,029	14	.3	2.6	97.1
Cane sugar	23.5	(7)	25	15,390	22.3	1.1	47	844	19	----	3.3	96.7
Beet sugar	33.6	(7)	79	11,220	34.2	2.2	64	1,227	11	.4	2.2	97.4
Confectionery and related products	13.0	(7)	258	43,748	13.8	.6	40	1,000	14	.1	2.0	97.9
Beverages	26.4	(8)	828	93,748	23.8	1.1	72	1,465	17	.2	2.8	97.0
Bottled soft drinks	29.3	(7)	335	10,593	26.7	.4	13	300	12	----	.4	99.6
Malt and malt liquors	28.3	(7)	269	61,096	25.3	2.1	80	1,498	16	.2	3.5	96.3
Wines	25.4	(7)	106	4,163	19.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Distilled liquors	8.5	(7)	118	22,891	8.3	.8	71	300	24	.8	.4	98.8
Miscellaneous food products	17.1	(7)	311	35,670	14.9	.6	28	438	14	.1	1.2	98.7
Tobacco manufacturers	7.5	(7)	172	44,114	6.8	.5	67	867	14	----	6.3	93.7
Textile-mill products	[6] 10.2	(7)	2,552	756,795	[6] 11.0	[6] 1.0	82	1,151	17	.2	4.6	95.2
Cotton yarn and textiles	9.6	(7)	589	288,166	10.0	1.0	85	1,062	19	.4	4.1	95.5
Rayon, other synthetic, and silk textiles	7.7	+12	235	71,471	9.7	.6	52	1,029	16	.2	2.4	97.4
Woolen and worsted textiles	13.1	(7)	329	119,353	13.8	1.2	69	1,400	20	.1	3.3	96.6
Knit goods	5.6	(7)	714	122,357	5.4	.2	43	1,058	14	.1	2.0	97.9
Dyeing and finishing textiles	14.8	(7)	323	60,201	18.3	1.8	84	1,222	18	.2	4.6	95.2
Carpets, rugs, and other floor coverings	15.2	(7)	84	50,755	15.0	2.1	139	1,271	15	.1	9.5	90.4
Hats (except cloth and millinery)	16.9	+6	73	11,919	18.2	.4	24	800	11	----	1.6	98.4
Cordage and twine	15.4	(7)	57	8,747	19.0	.7	35	320	13	----	7.1	92.9
Miscellaneous textile goods	14.7	−10	148	23,826	16.3	2.1	124	1,313	14	.7	5.3	94.0
Apparel and other finished textile products	[6] 6.2	(7)	2,344	246,614	[6] 6.6	[6] .2	21	610	9	.1	1.5	98.4
Clothing, men's and boys'	6.1	(7)	775	122,969	6.4	.1	18	450	9	.1	.3	99.6
Clothing, women's and children's	4.3	+5	1,025	84,916	4.9	.1	18	1,160	8	----	.8	99.2
Millinery	3.8	(7)	64	2,615	8.3	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Fur goods and miscellaneous apparel	5.9	−15	135	11,688	7.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous fabricated textile products	13.9	+9	345	24,426	12.5	.6	36	532	10	----	4.8	95.2

See footnotes at end of table.

TABLE A.—Injury rates[1] by industry, 1950 (with comparable injury-frequency rates for 1949)—Con.

Industry	1949 revised data[2]		1950 survey data									
							Average days lost or charged per case[4]			Percent of disabling injuries resulting in[4]—		
	Injury frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported[3]	Injury-frequency rates	Injury-severity rates[4]	All cases[5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Manufacturing—Continued												
Lumber and wood products (except furniture)	[6] 49.0	−12	2,622	225,368	[6] 49.8	[6] 4.3	99	1,070	17	0.7	3.7	95.6
Logging	93.3	(7)	269	23,453	96.5	12.9	129	1,717	24	1.2	2.0	96.8
Sawmills and plaing mills[10]	58.2	(8)	973	86,953	59.3	5.2	101	1,087	16	.8	3.4	95.8
Planing mills	38.5	(7)	198	12,177	43.5	5.8	127	1,085	14	.9	5.6	93.5
Sawmills	58.1	(7)	433	28,090	61.4	4.9	83	875	16	.7	2.7	96.6
Sawmills and planning mills, integrated	46.6	(7)	264	40,621	45.6	5.1	107	1,276	16	.9	3.1	96.0
Veneer mills	32.1	(7)	55	4,307	34.6	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Millwork and related products	28.1	(8)	618	57,134	29.5	2.4	73	874	13	.3	4.7	95.0
Millwork and structural wood products	26.5	(7)	536	37,914	28.2	2.2	72	803	12	.3	5.4	94.3
Plywood mills	32.5	(7)	82	19,220	32.9	3.1	77	1,188	17	.4	2.9	96.7
Wooden containers	34.7	(7)	413	33,722	34.6	1.8	55	651	12	.1	5.9	94.0
Miscellaneous wood products	29.0	+10	349	24,106	27.5	2.9	95	1,110	14	.2	6.1	93.7
Furniture and fixtures[10]	[6] 20.2	−11	1,465	175,660	[6] 21.0	[6] 1.5	70	794	13	.2	6.2	93.6
Household furniture	21.1	(8)	1,102	130,971	21.6	1.6	71	813	12	.1	6.3	93.6
Household furniture, nonmetal	21.8	(8)	800	92,512	21.8	1.6	70	734	12	.1	6.8	93.1
Metal household furniture	18.3	(8)	51	12,035	23.5	1.1	56	1,160	12	-------	3.9	96.1
Mattresses and bedsprings	19.0	(7)	251	26,424	18.1	2.0	91	1,264	12	.2	5.4	94.4
Office furniture	17.0	(8)	65	14,006	18.5	1.8	83	697	11	.6	5.4	94.0
Wood office furniture	27.4	(8)	19	2,408	22.2	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Metal office furniture	13.3	(8)	46	11,598	17.1	1.8	87	781	11	.4	6.6	93.0
Public-building and professional furniture	24.7	(8)	42	8,618	24.1	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Partitions and fixtures	19.1	+12	178	14,386	18.8	1.5	73	711	19	-------	7.8	92.2
Screens, shades, and blinds	15.4	(8)	76	7,346	17.1	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Paper and allied products	[6] 16.1	(7)	1,653	324,008	[6] 16.1	[6] 1.4	77	865	15	.3	5.3	94.4
Pulp, paper, and paperboard mills	16.4	(7)	474	200,843	15.7	1.6	85	894	18	.5	3.9	95.6
Envelopes	12.7	(7)	79	8,565	15.4	.4	25	333	14	-------	3.4	96.6
Paperboard containers and boxes	16.9	(7)	851	73,281	17.9	1.5	85	865	15	.2	6.7	93.1
Miscellaneous paper and allied products	14.7	(7)	249	41,319	14.8	.9	55	965	13	.1	3.6	96.3
Printing, publishing, and allied industries	[6] 8.3	(7)	2,918	265,308	[6] 8.2	[6] .5	59	958	14	.2	3.7	96.1
Newspapers and periodicals	8.9	(7)	927	128,834	8.3	.5	59	1,146	14	.2	2.8	97.0
Bookbinding and related products	11.2	(7)	131	9,222	8.0	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous printing and publishing	7.5	(7)	1,860	127,252	8.2	.5	58	801	13	.1	4.6	95.3
Chemicals and allied products	[6] 10.4	+11	2,048	399,185	[6] 11.1	[6] 1.2	99	1,057	16	.7	3.8	95.5
Industrial inorganic chemicals	8.4	(8)	141	50,886	9.5	1.0	51	429	17	.4	2.7	96.9
Industrial organic chemicals	5.2	(8)	314	164,587	4.8	1.1	193	1,071	19	1.9	5.6	92.5
Plastics, except synthetic rubber	5.0	−8	56	33,154	7.0	1.9	132	1,336	12	.5	6.9	92.6
Synthetic rubber	3.2	+39	18	5,912	3.4	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Synthetic fibers	3.0	−17	24	51,969	2.1	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Explosives	1.4	−22	36	9,075	3.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous industrial organic chemicals	7.5	(8)	180	64,477	6.4	.8	131	1,119	20	.9	5.0	94.1
Drugs and medicines	9.0	−6	256	64,613	8.2	.3	41	513	16	.2	2.0	97.8
Soap and related products	7.3	(7)	197	26,867	7.9	1.6	130	1,489	17	.4	5.9	93.7
Paints, pigments, and related products	11.3	(7)	381	41,946	13.0	.8	53	1,156	12	-------	3.6	96.4
Fertilizers	22.7	+5	378	22,440	23.8	3.0	126	1,292	19	.9	4.2	94.9
Vegetable and animal oils and fats	21.8	+24	73	6,387	23.5	2.7	110	491	16	1.2	4.5	94.3
Compressed and liquefied gases	12.1	−14	93	5,088	11.4	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous chemicals and allied products	13.6	+32	215	16,371	17.6	.9	42	583	14	.3	1.8	97.9
Products of petroleum and coal[10]	[6] 9.6	(8)	(9)	176,850	[6] 9.3	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Petroleum refining[12]	8.4	(11)	(12)	143,280	7.7	(9)	(9)	(9)	(9)	[13] .7	(9)	(9)
Coke ovens[12]	11.5	(11)	(12)	24,100	12.1	(9)	(9)	(9)	(9)	[13] 1.9	(9)	(9)
Beehive	36.4	(11)	(12)	3,100	50.3	(9)	(9)	(9)	(9)	[13] .5	(9)	(9)
Byproduct	10.0	(11)	(12)	21,000	8.7	(9)	(9)	(9)	(9)	[13] 2.5	(9)	(9)
Paving and roofing materials	18.0	−8	48	8,034	15.8	1.9	121	2,004	20	-------	5.1	94.9
Rubber products	[6] 9.8	(7)	297	200,498	[6] 10.0	[6] 1.2	109	1,191	25	.4	5.2	94.4
Tires and inner tubes	5.9	(7)	38	87,997	5.6	1.0	187	1,170	31	1.0	8.2	90.8
Rubber footwear	4.8	−32	16	26,971	5.3	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous rubber products	15.2	(7)	243	85,530	15.3	1.6	102	1,226	23	.3	5.0	94.7
Leather and leather products	[6] 10.8	+6	779	171,873	[6] 10.8	[6] .7	57	728	14	.3	3.2	96.5
Leather tanning and finishing	24.7	(7)	140	25,930	22.5	1.3	58	653	17	.5	2.2	97.3
Boot and shoe cut stock and findings	18.5	(8)	59	2,941	18.4	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Footwear (except rubber)	7.7	(7)	388	127,343	7.5	.3	43	658	12	.3	2.0	97.7
Miscellaneous leather products	9.8	(7)	192	15,659	11.7	1.0	73	692	12	-------	9.0	91.0

See footnotes at end of table.

TABLE A.—Injury rates[1] by industry, 1950 (with comparable injury-frequency rates for 1949)—Con.

Industry	1949 revised data[2]		1950 survey data									
							Average days lost or charged per case[4]			Percent of disabling injuries resulting in[4]—		
	Injury frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported[3]	Injury-frequency rates	Injury-severity rates[4]	All cases[5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Manufacturing—Continued												
Stone, clay, and glass products	[6] 20.6	+5	1,634	259,085	[6] 20.5	[6] 2.2	87	1,092	15	0.7	3.0	96.3
Glass and glass products	13.4	(7)	246	92,528	12.5	1.0	86	1,259	18	.2	4.3	95.5
Cement, hydraulic[12]	7.9	(11)	(12)	24,733	7.2	(9)	(9)	(9)	(9)	[13] 2.0	(9)	(9)
Structural clay products	37.1	(7)	547	53,925	35.9	2.2	61	907	14	.5	1.6	97.9
Pottery and related products	16.1	(7)	130	31,675	16.9	2.6	148	1,017	13	1.9	2.2	95.9
Concrete, gypsum, and mineral wool	25.3	(7)	386	16,470	25.5	2.5	97	1,094	12	.7	4.1	95.2
Lime[12]	31.3	(8)	(12)	6,390	27.7	(9)	(9)	(9)	(9)	[13] .5	(9)	(9)
Cut-stone and stone products	36.7	(7)	86	2,562	34.3	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous nonmetallic mineral products	16.7	(7)	239	30,802	19.1	3.0	139	1,062	15	.8	7.2	92.0
Primary metal industries[10]	[6] 14.5	(8)	2,014	935,165	[6] 14.8	[6] 1.4	111	882	22	.8	5.0	94.2
Blast furnaces and steel mills	6.8	(7)	207	551,342	5.7	1.2	219	898	40	1.8	8.4	89.8
Iron and steel foundries	29.4	(8)	886	168,953	31.7	2.2	64	835	14	.5	2.5	97.0
Gray-iron and malleable foundries	31.1	+7	745	122,160	33.7	2.2	59	878	13	.4	2.4	97.2
Steel foundries	23.7	(7)	141	46,793	25.0	2.1	92	629	19	.9	2.8	96.3
Nonferrous primary smelting and refining[12]	23.2	(11)	(12)	30,300	22.9	(9)	(9)	(9)	(9)	[13] 1.1	(9)	(9)
Copper	18.3	(11)	(12)	11,500	17.6	(9)	(9)	(9)	(9)	[13] 1.0	(9)	(9)
Lead-silver	16.7	(11)	(12)	3,700	18.7	(9)	(9)	(9)	(9)	[13] 2.4	(9)	(9)
Zinc	33.0	(11)	(12)	9,100	31.2	(9)	(9)	(9)	(9)	[13] 1.1	(9)	(9)
Miscellaneous	20.7	(11)	(12)	6,000	22.3	(9)	(9)	(9)	(9)	[13] .6	(9)	(9)
Nonferrous rolling, drawing, and alloying	11.1	(8)	68	46,182	15.3	1.6	94	919	18	.3	6.7	93.0
Nonferrous foundries	19.2	−15	454	39.292	24.8	1.0	37	504	12	.1	3.5	96.4
Miscellaneous primary metal industries	14.8	(8)	386	97,497	15.8	1.9	70	985	16	.1	5.2	94.7
Iron and steel forgings	18.5	(7)	169	46.063	21.2	1.7	71	985	15	.1	5.2	94.7
Wire drawing	10.9	(8)	51	22.891	10.2	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Welded and heavy-riveted pipe	15.5	(7)	31	10,063	14.5	1.0	65	714	29	----	5.3	94.7
Cold-finished steel	14.3	(7)	47	13,590	19.4	.7	26	492	14	----	2.5	97.5
Primary metal industries, not elsewhere classified	24.4	(8)	88	4,890	23.4	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Fabricated metal products	[6] 17.5	(8)	3,775	669,022	[6] 19.0	[6] 1.5	76	785	14	.2	6.3	93.5
Tin cans and other tinware	11.8	(7)	105	43,934	12.2	1.2	110	567	16	.5	11.6	87.9
Cutlery, hand tools, and hardware	13.1	(8)	520	115,091	14.5	.9	67	722	15	[14]	6.9	93.1
Cutlery and edge tools	14.3	(7)	126	20,664	18.6	1.0	49	529	15	.2	4.4	95.4
Hand tools, files, and saws	16.7	(7)	199	26,610	17.7	.8	43	650	15	----	4.3	95.7
Hardware	11.0	(7)	195	67,817	11.6	.9	88	780	15	----	9.6	90.4
Heating and plumbing equipment	19.0	(8)	440	118,859	21.6	1.5	61	844	13	.1	5.2	94.7
Sanitary ware and plumbers' supplies	15.5	(7)	136	48,194	19.2	1.0	45	541	14	.1	4.7	95.2
Oilburners, heating and cooking apparatus	20.3	−6	304	70,665	22.5	1.7	70	1,000	12	.1	5.5	94.4
Fabricated structural metal products	24.1	(8)	1,088	131,574	25.0	2.8	96	1,021	15	.5	5.1	94.4
Structural steel and ornamental metalwork	23.4	+5	540	67,854	23.2	2.4	100	892	17	.6	5.2	94.2
Metal doors, sash, frame, and trim	21.0	(8)	82	9,178	29.9	3.0	80	1,027	7	.2	5.9	93.9
Boiler-shop products	25.8	(7)	296	43,367	24.5	2.7	88	1,253	14	.3	4.3	95.4
Sheet-metal work	24.4	+11	170	11,175	26.8	3.4	138	1,003	14	1.1	5.9	93.0
Metal stamping, coating and engraving[10]	17.0	(8)	734	122,225	20.2	1.4	81	702	15	.1	8.9	91.0
Vitreous-enameled products	17.3	−21	39	8,248	20.8	1.8	89	852	15	----	8.8	91.2
Stamped and pressed metal products	14.5	(7)	489	99,948	17.3	1.6	101	703	16	.1	11.2	88.7
Metal coating and engraving	24.8	+5	202	13,859	29.3	.7	21	409	12	----	2.2	97.8
Fabricated wire products	17.4	(8)	237	42,576	18.3	1.1	69	559	16	.5	4.5	95.0
Miscellaneous fabricated metal products	13.8	(8)	651	94,763	14.5	.8	54	657	13	----	6.3	93.7
Metal barrels, drums, kegs, and pails	12.0	−11	33	6,622	13.7	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Steel springs	12.9	−5	33	8,999	17.8	.8	34	525	14	----	3.9	96.1
Bolts, nuts, washers, and rivets	13.6	(7)	103	24.373	16.1	.8	64	750	13	----	6.9	93.1
Screw-machine products	16.8	+8	267	23,172	14.9	.8	48	569	12	----	6.5	93.5
Fabricated metal products, not elsewhere classified	13.1	(8)	215	31,597	12.8	.7	52	655	14	----	6.0	94.0
Machinery (except electrical)	[6] 13.9	(7)	3,923	1,030,825	[6] 13.8	[6] 1.1	72	781	15	.2	5.6	94.2
Engines and turbines	11.7	(7)	74	55,335	11.0	.7	53	592	15	.2	4.3	95.5
Agricultural machinery and tractors	17.1	(7)	241	147,719	15.8	1.7	74	769	13	.2	6.9	92.9
Construction and mining machinery	19.6	(7)	308	80,767	21.6	1.9	73	883	14	.1	6.0	93.9
Metalworking machinery	11.3	(7)	957	142,572	11.5	.9	75	692	14	.3	6.3	93.4
Special-industry machinery	16.1	(8)	686	116,630	15.6	1.1	63	755	15	.2	4.7	95.1
Food-products machinery	13.8	−8	151	21,614	16.3	1.4	73	750	16	.3	5.5	94.2
Textile machinery	13.2	(7)	139	34,940	11.9	.8	60	674	19	.3	3.2	96.5
Miscellaneous special-industry machinery	18.3	(7)	396	60,076	17.2	1.2	62	781	13	.2	5.1	94.7

See footnotes at end of table.

TABLE A.—Injury rates [1] by industry, 1950 (with comparable injury-frequency rates for 1949)—Con.

Industry	1949 revised data [2]		1950 survey data									
							Average days lost or charged per case [4]			Percent of disabling injuries resulting in [4]—		
	Injury frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported [3]	Injury-frequency rates	Injury-severity rates [4]	All cases [5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Manufacturing—Continued												
Machinery (except electrical)—Continued												
General industrial machinery	16.4	(8)	641	141,223	15.3	1.2	79	970	14	0.2	05.5	94.3
Pumps and compressors	16.4	+8	139	36,810	15.4	2.4	153	1,092	14	.4	10.7	88.9
Elevators, escalators, and conveyors	21.3	+7	85	21,993	16.1	.4	17	300	14	--------	1.2	98.8
Mechanical power-transmission equipment (except ball and roller bearings)	14.6	−14	125	32,371	13.8	.5	40	413	16	--------	6.2	93.8
Miscellaneous general industrial machinery	15.1	(7)	292	50,049	15.9	1.4	72	1,145	14	.3	3.8	95.9
Commercial and household machinery	8.0	(7)	323	227,742	9.1	.8	99	738	17	.4	7.9	91.7
Miscellaneous machinery parts	14.7	(8)	693	118,837	15.4	.9	55	627	16	.3	3.4	96.3
Valves and fittings	17.9	(8)	103	27,050	17.7	1.1	60	550	21	.5	2.3	97.2
Fabricated pipe and fittings	12.1	−36	38	4,379	16.0	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Ball and roller bearings	10.9	(7)	62	50,797	12.0	.5	49	668	14	.1	4.3	95.6
Machine shops, general	14.3	−16	490	36,611	15.1	.6	44	516	18	.2	2.9	96.9
Electrical machinery	[6] 6.7	(7)	1,122	632,992	[6] 7.4	[6] .7	81	739	14	.2	7.6	92.2
Electrical industrial apparatus	7.1	(7)	523	244,471	7.9	.7	74	737	14	.2	6.7	93.1
Electrical appliances	6.7	−25	74	40,866	7.4	1.0	143	774	15	.3	14.8	84.9
Insulated wire and cable	13.7	+19	46	14,129	15.6	1.1	63	818	17	.3	3.5	96.2
Electrical equipment for vehicles	8.0	−16	51	42,779	5.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Electric lamps	3.7	(7)	36	21,244	4.0	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Communication equipment	4.9	(8)	294	250,838	6.1	.5	71	647	13	.1	8.1	91.8
Radios and related products	5.3	+20	221	159,550	6.9	.3	62	624	12	--------	8.2	91.8
Radio tubes	3.1	(8)	20	27,992	3.9	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous communication equipment	4.6	(7)	53	63,296	5.1	.7	89	683	15	.4	7.7	91.9
Miscellaneous electrical products	11.5	(8)	98	18,665	12.7	1.5	108	791	11	.4	9.3	90.3
Batteries	14.9	(7)	53	12,187	15.0	1.3	73	591	11	.5	5.5	94.0
Electrical products, not elsewhere classified	4.9	−14	45	6,478	8.1	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Transportation equipment	[6] 9.4	−7	1,008	1,176,941	[6] 8.3	[6] .8	116	753	23	.5	8.9	90.6
Motor vehicles and equipment	7.7	(8)	498	745,785	7.3	.6	115	687	19	.4	10.8	88.8
Motor vehicles, bodies, and trailers	6.8	(7)	263	469,260	5.9	.6	113	742	19	.5	9.1	90.4
Motor-vehicle parts and accessories	9.6	−11	235	276,525	9.6	.7	120	610	20	.2	14.6	85.2
Aircraft and parts	5.9	(8)	131	295,210	4.6	.8	159	1,029	18	1.0	8.1	90.9
Aircraft	4.3	(7)	32	188,185	4.0	.9	280	994	20	2.6	10.7	86.7
Aircraft parts	9.2	+6	99	107,025	5.9	.6	94	1,059	17	.1	6.7	93.2
Ship and boat building and repairing	27.4	(8)	267	62,174	27.5	2.2	88	985	31	.4	3.7	95.9
Ship building and repairing	25.9	(7)	139	57,974	25.4	2.3	94	1,020	33	.4	3.7	95.9
Boat building and repairing	38.3	(7)	128	4,200	38.9	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Railroad equipment	14.0	(7)	90	64,717	11.4	1.1	146	866	43	.7	7.3	92.0
Miscellaneous transportation equipment	13.6	(7)	22	9,055	15.8	1.0	73	668	13	.5	5.0	94.5
Instruments and related products	[6] 8.2	(8)	488	166,643	[6] 7.7	[6] .3	32	548	11	--------	3.9	96.1
Scientific instruments	4.4	(8)	37	7,237	5.2	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Mechanical measuring and controlling instruments	8.5	−12	125	46,457	8.5	.5	51	593	15	--------	6.1	93.9
Optical instruments and lenses	6.1	(8)	34	8,831	5.2	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Medical instruments and supplies	16.4	(8)	140	24,709	13.1	.2	15	675	8	--------	1.1	98.9
Ophthalmic goods	5.6	(8)	43	8,487	4.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Photographic equipment and supplies	5.3	(7)	63	44,412	5.5	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Watches and clocks	5.8	(8)	46	26,510	5.8	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Miscellaneous manufacturing industries	[6] 11.6	(8)	1,159	159,546	[6] 13.3	[6] 1.3	90	827	13	.3	7.3	92.4
Jewelry, silverware, and plated ware	6.0	(8)	118	24,057	8.0	.7	96	1,200	16	--------	6.7	93.3
Fabricated plastics products	14.9	+12	179	26,211	16.2	1.9	100	1,336	11	.4	5.0	94.6
Brooms and brushes	14.6	(7)	81	8,285	17.6	.4	24	394	14	--------	2.7	97.3
Morticians' goods	19.0	+14	100	7,325	20.9	.9	42	600	15	--------	4.6	95.4
Miscellaneous manufacturing	11.3	(7)	681	93,668	12.7	1.4	109	708	13	.5	10.0	89.5
Ordnance and accessories	6.6	(7)	29	24,355	6.2	(9)	(9)	(9)	(9)	(9)	(9)	(9)
Nonmanufacturing												
Construction	39.9	(7)	[13] 5,606	(9)	41.0	3.8	93	1,332	14	.7	2.7	96.6
General contractors	42.6	(8)	2,752	(9)	44.5	4.2	93	1,312	14	.7	2.8	96.5
General building contractors	41.7	(7)	1,846	(9)	45.4	2.9	64	1,219	13	.4	2.2	97.4
Heavy construction, except highway and street	41.9	(7)	330	(9)	42.8	6.4	150	1,236	19	1.3	4.2	94.5
Highway and street construction	45.5	(7)	576	(9)	44.8	4.0	89	1,644	11	.7	2.4	96.9

See footnotes at end of table.

TABLE A.—Injury rates [1] by industry, 1950 (with comparable injury-frequency rates for 1949)—Con.

Industry	1949 revised data [2]		1950 survey data									
							Average days lost or charged per case [4]			Percent of disabling injuries resulting in [4]—		
	Injury-frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported [3]	Injury-frequency rates	Injury-severity rates [4]	All cases [5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Nonmanufacturing—Continued												
Construction—Continued												
Special-trades contractors	33.2	[8]	2,854	[9]	33.4	3.1	91	1,399	13	0.7	2.4	96.9
Plumbing, heating, and air conditioning	30.7	[7]	726	[9]	28.5	1.7	61	1,356	10	.7	.9	98.4
Painting, paperhanging, and decorating	17.7	[7]	419	[9]	23.5	3.4	144	1,533	23	1.3	2.7	96.0
Electrical work	27.7	[7]	363	[9]	26.0	3.2	125	1,584	15	1.1	2.7	96.2
Masonry, stone setting, and other stonework	29.3	[7]	211	[9]	39.6	2.2	55	1,700	13.	.4	1.2	98.4
Plastering and lathing	42.5	[7]	99	[9]	44.8	.5	10	--------	10	--------	--------	100.0
Terrazzo, tile, marble, and mosaic work	27.1	[7]	71	[9]	21.5	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Roofing and sheet-metal work	32.6	[7]	278	[9]	43.1	2.4	56	1,517	11	.4	1.3	98.3
Structural-steel erection and ornamental iron work	52.8	+9	55	[9]	58.9	11.0	186	1,582	14	1.4	5.7	92.9
Installation or erection of building equipment, not elsewhere classified	37.6	[7]	29	[9]	25.5	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Miscellaneous special-trades contractors [16]	36.3	[8]	603	[9]	36.8	3.1	84	1,072	14	.6	3.4	96.0
Communication: [17]												
Telephone (wire and radio)	2.3	[7]	[15] 126	541,165	2.1	.1	64	1,830	18	.6	.5	98.9
Radio broadcasting and television	1.7	[7]	[15] 429	16,306	2.5	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Transportation: [17]												
Stevedoring	67.6	[7]	49	[9]	59.4	6.0	100	1,384	30	.4	3.6	96.0
Streetcar	13.4	−6	14	8,074	16.7	.7	44	450	15	.4	1.8	97.8
Bus (local)	13.1	−5	299	39,784	11.4	.7	62	1,171	18	.2	2.8	97.0
Local transportation systems, integrated	17.6	[7]	39	128,935	16.1	1.2	73	1,834	17	.6	1.2	98.2
Trucking and hauling	28.3	[7]	1,288	30,473	36.6	3.4	92	1,330	13	1.0	1.7	97.3
Warehousing and storage	31.0	[7]	2,062	33,885	32.5	2.4	74	1,061	13	.4	3.8	95.8
Transportation, not elsewhere classified	5.3	[7]	130	2,329	5.6	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Heat, light, and power [10]	16.0	[7]	[15] 599	370,524	13.8	1.9	136	1,549	17	1.3	2.8	95.9
Electric light and power	13.9	[7]	371	276,835	12.1	2.1	172	1,569	18	1.8	3.1	95.1
Gas	22.1	[7]	214	93,195	18.9	1.3	68	1,496	14	.4	2.2	97.4
Waterworks	27.5	[7]	[15] 173	12,265	21.9	1.6	73	2,433	14	.8	.6	98.6
Personal services	8.9	[7]	3,482	147,429	10.0	.5	51	1,389	13	.4	1.2	98.4
Dry cleaning	5.1	[7]	701	17,287	6.5	.1	18	1,150	9	--------	.9	99.1
Laundries	6.7	[7]	589	25,502	7.1	.4	54	1,556	16	--------	2.5	97.5
Laundry with dry cleaning	7.5	[7]	493	35,286	7.8	.5	65	1,294	15	.4	2.3	97.3
Amusement and related services	10.8	[7]	370	10,006	8.8	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Hotels	13.5	[7]	507	45,836	16.0	.7	44	1,490	12	.4	.6	99.0
Medical and other professional services	4.0	[7]	449	8,613	4.6	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Miscellaneous personal services	4.9	[7]	373	4,899	5.2	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Business services	3.9	[7]	3,468	193,343	3.9	.3	81	1,823	13	.4	2.4	97.2
Banks and other financial agencies	2.4	[7]	1,162	56,346	2.1	.3	123	1,562	12	.4	5.5	94.1
Insurance	2.1	[7]	593	104,345	2.0	.1	51	1,780	14	.2	1.2	98.6
Real estate	5.7	[7]	399	5,434	5.5	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Miscellaneous business services	12.7	[7]	490	16,100	12.3	1.5	119	2,404	13	.5	3.1	96.4
Automobile repair shops and garages	11.4	−16	495	5,703	13.0	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Miscellaneous repair services	27.2	+6	329	5,415	21.9	1.4	63	1,150	12	.4	2.2	97.4
Educational services	7.6	[7]	256	124,403	7.9	.3	43	1,267	13	.2	1.3	98.5
Fire departments	32.1	[7]	215	32,266	35.5	1.9	55	1,350	14	.6	.6	98.8
Police departments	27.5	[7]	173	22,992	32.4	1.5	47	2,470	15	.4	.3	99.3
Trade	[6] 10.9	[7]	13,924	449,334	[6] 12.3	[6] 6	45	1,046	12	.2	1.8	98.0
Wholesale distributors	13.3	[7]	3,383	112,393	15.2	.7	47	1,070	11	.4	1.4	98.2
Retail, general merchandise	5.2	[7]	686	102,724	5.8	.2	32	835	14	.2	.9	98.9
Retail food	11.7	[7]	1,178	40,479	13.3	.5	36	1,187	12	.1	1.6	98.3
Wholesale and retail dairy products	23.7	[7]	473	32,209	26.9	1.4	52	1,557	14	.2	1.8	98.0
Retail automobiles and accessories	14.1	[7]	1,397	28,651	15.5	.6	37	657	11	.2	2.1	97.7
Filling stations	4.8	[7]	373	4,346	12.0	[9]	[9]	[9]	[9]	[9]	[9]	[9]
Retail apparel and accessories	3.9	−11	1,154	32,136	4.0	.1	33	1,533	14	--------	1.2	98.8
Miscellaneous retail stores	9.7	[7]	2,578	43,588	11.1	.7	61	867	15	.4	2.6	97.0
Wholesale and retail building supplies	26.4	[7]	824	22,340	29.1	1.4	50	828	13	.2	2.9	96.9
Wholesale and retail trade combined, not elsewhere classified	16.5	[7]	442	11,296	13.6	.5	37	1,283	14	--------	1.8	98.2
Eating and drinking places	10.6	[7]	1,436	19,172	10.8	.5	48	1,044	11	.2	2.2	97.6

See footnotes at end of table.

TABLE A.—Injury rates[1] by industry, 1950 (with comparable injury-frequency rates for 1949)—Con.

Industry	1949 revised data[2]		1950 survey data									
							Average days lost or charged per case[4]			Percent of disabling injuries resulting in[4]—		
	Injury frequency rates	Percent change from previously published rates	Number of establishments reporting	Number of employees reported[3]	Injury-frequency rates	Injury-severity rates[4]	All cases[5]	Permanent-partial disabilities	Temporary-total disabilities	Death and permanent-total disabilities	Permanent-partial disabilities	Temporary-total disabilities
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Mining and quarrying[12]												
Coal mines	56.0	(11)	(12)	476,800	52.8	7.9	150	725	29	[13] 1.8	[13] 2.1	96.1
Bituminous	52.6	(11)	(12)	402,000	48.8	8.1	167	689	32	[13] 2.0	[13] 2.4	95.6
Anthracite	72.7	(11)	(12)	74,800	72.5	6.9	96	977	22	[13] 1.1	[13] 1.1	97.8
Metal mines	48.5	(11)	(12)	69,700	45.6	(9)	(9)	(9)	(9)	[13] 1.3	(9)	(9)
Iron	21.3	(11)	(12)	27,800	18.8	(9)	(9)	(9)	(9)	[13] 1.9	(9)	(9)
Copper	34.6	(11)	(12)	15,900	32.5	(9)	(9)	(9)	(9)	[13] 1.5	(9)	(9)
Lead-zinc	89.3	(11)	(12)	14,700	84.6	(9)	(9)	(9)	(9)	[13] 1.2	(9)	(9)
Gold-silver	112.6	(11)	(12)	5,300	121.3	(9)	(9)	(9)	(9)	[13] .8	(9)	(9)
Gold placer	30.7	(11)	(12)	3,400	24.0	(9)	(9)	(9)	(9)	--------	(9)	(9)
Miscellaneous metal	70.9	(11)	(12)	2,600	79.4	(9)	(9)	(9)	(9)	[13] 1.3	(9)	(9)
Nonmetal mines	42.1	(11)	(12)	12,100	41.4	(9)	(9)	(9)	(9)	[13] 1.7	(9)	(9)
Quarries	38.1	(11)	(12)	51,877	36.6	(9)	(9)	(9)	(9)	[13] .8	(9)	(9)
Cement (excluding mills)	11.7	(11)	(12)	4,067	10.7	(9)	(9)	(9)	(9)	[13] 9.6	(9)	(9)
Limestone	39.0	(19)	(12)	28,910	37.6	(9)	(9)	(9)	(9)	[13] .8	(9)	(9)
Marble	38.1	(11)	(12)	2,700	32.3	(9)	(9)	(9)	(9)	[13] 1.1	(9)	(9)
Granite	40.7	(11)	(12)	7,300	39.5	(9)	(9)	(9)	(9)	--------	(9)	(9)
Traprock	44.2	(11)	(12)	2,800	51.6	(9)	(9)	(9)	(9)	[13] .7	(9)	(9)
Slate	54.2	(11)	(12)	1,900	43.7	(9)	(9)	(9)	(9)	[13] .5	(9)	(9)
Sandstone	44.4	(11)	(12)	4,200	40.7	(9)	(9)	(9)	(9)	--------	(9)	(9)
Ore dressing (mills and auxiliaries)	23.0	(11)	(12)	15,700	22.8	(9)	(9)	(9)	(9)	[13] .9	(9)	(9)
Copper	15.2	(11)	(12)	5,900	15.3	(9)	(9)	(9)	(9)	[13] .8	(9)	(9)
Iron	15.4	(11)	(12)	3,700	13.0	(9)	(9)	(9)	(9)	[13] 3.2	(9)	(9)
Gold-silver	39.4	(11)	(12)	900	45.5	(9)	(9)	(9)	(9)	--------	(9)	(9)
Lead-zinc	28.5	(11)	(12)	3,600	31.6	(9)	(9)	(9)	(9)	[13] .9	(9)	(9)
Miscellaneous metals	52.8	(11)	(12)	1,600	45.3	(9)	(9)	(9)	(9)	--------	(9)	(9)

[1] The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked. A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any one or more days after the day of injury (including Sundays, days off, or plant shut-down). The severity rate is the average number of days lost for each 1,000 employee-hours worked. The computations of days lost include standard time charges for fatalities and permanent disabilities. These data are compiled according to the American Standard Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

[2] Revised injury-frequency rates for 1949 reflect both changes in industry definitions and reclassification of individual reports on the basis of improved classification information. Revisions in rates for nonmanufacturing industries reflect reclassifications only, as there were no changes in definition in that group.

The use of revised employment weights also affected the averages for industry groups, e. g., the 1949 average for all-manufacturing was changed from 15.0 to 14.5. This revised figure is reasonably comparable, however, with the all-manufacturing injury-frequency rates published for previous years. (See table F for an analysis of changes in industry definitions. See also footnotes 7 and 8.)

[3] Reports in this survey secured by the Bureau of Labor Statistics include all employees—production and related workers; force-account construction workers; administrative, supervisory, sales, technical, service, and office personnel. Reports compiled by the Bureau of Mines, U. S. Department of the Interior (see footnote 12), include men engaged in production, development, maintenance, and repair work, and supervisory and technical personnel at the operation; but exclude office personnel and employees in stores or affiliated operations not directly connected with mining or refining.

[4] Based on reports (approximately 60 percent of the total sample) which furnished details regarding the resulting disabilities.

[5] Each death or permanent-total disability was charged with a time loss of 6,000 days.

[6] Weighted average; rate for each industry was weighted by the estimated total current employment in that industry.

[7] Change from previously published figure was less than 5 percent; rate may be considered reasonably comparable with those published previously.

[8] New industry, comparable rates not available for earlier years.

[9] Not available or insufficient data to warrant presentation of average.

[10] Includes data for industries not shown separately.

[11] Rates shown represent final averages for the year, as compiled by the Bureau of Mines, rather than revisions in industry definition.

[12] Compiled by the Bureau of Mines, U. S. Department of the Interior; data represent preliminary estimates based on an average of 80 percent coverage of all mining industries.

[13] Fatalities only.

[14] Less than 0.05.

[15] Primarily reported by company instead of by establishment.

[16] Includes carpentering, concrete work, excavating and foundation work, and wrecking and demolition work, shown separately in previous tabulations.

[17] Data not available for all industries within group.

[18] Includes permanent-total and permanent-partial disabilities.

[19] Revised to include quarries of lime plants.

TABLE B.—Changes in exposure, disabling injuries, and injury rates for 42,171 identical establishments, 1949–50

Industry	Number of establishments reporting	Percent of change in—					
		Employees	Employee-hours worked	Disabling injuries	Total time lost [1]	Frequency rate	Severity rate [1]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Manufacturing							
Total, manufacturing	27,098	+6	+10	+9	[2]	[3] +1	[3] −3
Food and kindred products	3,444	+1	+1	−3	−19	[3] −4	[3] −14
Meat products	652	+2	+1	−3	−11	−5	−14
Dairy products	241	−4	−5	−4	−22	[2]	−15
Canning and preserving	342	+1	+3	+1	+68	−1	+63
Grain-mill products	523	−3	−2	−8	−33	−6	−31
Bakery products	535	+2	+1	+1	+21	[2]	+20
Sugar	88	+1	+6	+2	−17	−5	−23
Cane sugar	24	−3	+2	−8	−18	−10	−21
Beet sugar	64	+6	+13	+15	−16	+2	−25
Confectionery and related products	199	[2]	−1	+8	−1	+9	[2]
Beverages	647	+1	+2	−7	−48	−9	−54
Bottled soft drinks	209	−5	−6	−14	[4]	−9	[4]
Malt and malt liquors	250	+2	+3	−7	−48	−10	−50
Wines	88	+5	+3	−30	+18	−31	+10
Distilled liquors	100	+3	+3	+18	−36	+13	−39
Miscellaneous food products	217	+1	+1	−11	−32	−12	−34
Tobacco manufacturers	138	−6	−6	−13	+14	−7	+21
Textile-mill products	1,938	+6	+10	+17	+7	[3] +6	[3] +7
Cotton yarn and textiles	483	+7	+15	+18	+14	+3	+1
Rayon, other synthetic, and silk textiles	170	+4	+8	+29	+44	+19	+32
Woolen and worsted textiles	288	+9	+13	+20	+38	+6	+30
Knit goods	512	+2	+3	−3	+2	−5	[2]
Dyeing and finishing textiles	270	+3	+5	+20	−9	+15	−12
Carpets, rugs, and other floor coverings	67	+5	+10	+2	−2	−7	−11
Hats (except cloth and millinery)	27	−12	−9	+8	[4]	+19	[4]
Cordage and twine	47	+5	+10	+45	−18	+33	−26
Miscellaneous textile goods	74	+8	+13	+23	+234	+9	+209
Apparel and other finished textile products	1,432	+2	+4	+8	−52	[3] +3	[3] −56
Clothing, men's and boys'	541	+3	+6	+11	−33	+5	−36
Clothing, women's and children's	572	+1	+1	+14	−66	+11	−65
Millinery	48	+11	+7	+154	[4]	+138	[4]
Fur goods and miscellaneous apparel	68	−3	−1	−5	[4]	−4	[4]
Miscellaneous fabricated textile products	203	+1	+5	−7	−58	−11	−59
Lumber and wood products (except furniture) [5]	2,002	+7	+8	+7	−6	[3] +1	[3] −5
Logging	207	+4	+1	+5	−31	+4	−32
Sawmills and planing mills [5]	716	+5	+5	+3	+18	−2	+15
Planing mills	135	+10	+11	+22	+146	+10	+119
Sawmills	324	+6	+7	+2	+8	−5	+2
Sawmills and planing mills, integrated	197	+2	+1	−2	+6	−3	+6
Veneer mills	42	+27	+33	+43	[4]	+7	[4]
Millwork and related products	487	+15	+16	+22	+27	+5	+8
Millwork and structural wood products	415	+13	+13	+19	+33	+6	+18
Plywood mills	72	+19	+24	+27	+17	+3	−8
Wooden containers	329	+6	+8	+7	−29	−1	−33
Miscellaneous wood products	263	+3	+4	[2]	−12	−5	−19
Furniture and fixtures [5]	1,096	+12	+18	+23	+7	[3] +4	[3] −14
Household furniture	842	+15	+21	+27	+10	+6	−8
Household furniture, nonmetal	606	+14	+21	+24	−4	+3	−20
Metal household furniture	40	+22	+26	+73	+59	+37	+22
Mattresses and bedsprings	196	+16	+22	+21	+240	−1	+191
Office furniture	46	[2]	+6	+12	+95	−1	+82
Wood office furniture	17	+11	+30	+7	[4]	−18	[4]
Metal office furniture	29	−2	+1	+14	[4]	+13	[4]
Public-building and professional furniture	32	+11	+11	+11	[4]	−1	[4]
Partitions and fixtures	131	+5	+7	+7	+26	+1	+22
Screens, shades, and blinds	44	+7	+9	+18	[4]	+8	[4]
Paper and allied products	968	+4	+7	+6	−5	[3] +3	[3] −5
Pulp, paper, and paperboard mills	427	+4	+7	+2	[2]	−6	−4
Envelopes	71	+5	+2	+31	−51	+29	−52
Paperboard containers and boxes	285	+3	+7	+27	+18	+18	+13
Miscellaneous paper and allied products	185	+6	+6	+6	−25	−1	−28
Printing, publishing, and allied industries	2,220	+2	+1	+1	+41	[3] −1	[3] +31
Newspapers and periodicals	727	+3	+2	−3	+58	−6	+54
Bookbinding and related products	93	+3	+3	−30	[4]	−32	[4]
Miscellaneous printing and publishing	1,400	[2]	[2]	+10	+33	+11	+34

See footnotes at end of table.

TABLE B.—Changes in exposure, disabling injuries, and injury rates for 42,171 identical establishments, 1949–50—Continued

Industry	Number of establishments reporting (1)	Percent of change in— Employees (2)	Employee-hours worked (3)	Disabling injuries (4)	Total time lost [1] (5)	Frequency rate (6)	Severity rate [1] (7)
Manufacturing—Continued							
Chemicals and allied products	1,653	+3	+4	+6	+40	[3] +5	[3] +36
Industrial inorganic chemicals	116	−3	−2	+13	−64	+15	−54
Industrial organic chemicals	235	+4	+4	−2	+133	−8	+95
Plastics, except synthetic rubber	41	+4	+5	+33	[4]	+28	[4]
Synthetic rubber	15	+5	+6	+14	[4]	+6	[4]
Synthetic fibers	21	+4	+5	−26	[4]	−30	[4]
Explosives	34	+9	+9	+144	[4]	+119	[4]
Miscellaneous industrial organic chemicals	124	+3	+2	−10	+28	−12	+22
Drugs and medicines	209	+6	+7	−1	−10	−8	−20
Soap and related products	150	+3	+5	+13	+261	+8	+245
Paints, pigments, and related products	329	+7	+9	+23	+1	+13	−7
Fertilizers	348	−3	−4	−2	+24	+2	+30
Vegetable and animal oils and fats	54	−1	[2]	+10	[4]	+10	[4]
Compressed and liquefied gases	71	+7	+4	−1	[4]	−5	[4]
Miscellaneous chemicals and allied products	141	+2	+4	+19	+187	+14	+186
Products of petroleum and coal:							
Paving and roofing materials	38	+15	+19	+3	−18	−13	−31
Rubber products	239	+4	+13	+19	−3	[3] +6	[3] +7
Tires and inner tubes	37	[2]	+13	+17	[4]	+4	[4]
Rubber footwear	13	−5	−1	+41	[4]	+40	[4]
Miscellaneous rubber products	189	+12	+17	+18	−15	[2]	−26
Leather and leather products	625	+2	+4	[2]	−21	[3] +2	[3] +3
Leather tanning and finishing	127	+1	+2	−8	−35	−10	−36
Boot and shoe cut stock and findings	44	+7	+7	+12	[4]	+5	[4]
Footwear (except rubber)	323	+2	+4	+3	+3	[2]	[2]
Miscellaneous leather products	131	−1	+3	+28	−5	+24	−11
Stone, clay, and glass products	1,218	+5	+9	+5	+10	[2]	[3] −7
Glass and glass products	204	+7	+12	+4	+46	−7	+30
Structural clay products	474	+1	+4	[2]	−15	−3	−19
Pottery and related products	119	[2]	+2	+7	+155	+4	+151
Concrete, gypsum, and mineral wool	235	+13	+15	+14	−16	[2]	−28
Cut-stone and stone products	57	−1	−1	−3	[4]	−2	[4]
Miscellaneous nonmetallic mineral products	129	+6	+11	+25	−21	+13	−26
Primary metal industries [5]	1,612	+9	+24	+22	+6	[3] +1	[3] −10
Blast furnaces and steel mills	188	+10	+27	+8	−6	−15	−31
Iron and steel foundries	746	+6	+17	+27	+24	+7	+6
Gray-iron and malleable foundries	622	+8	+20	+29	+20	+8	+1
Steel foundries	124	+3	+12	+18	+37	+6	+26
Nonferrous rolling, drawing, and alloying	38	+12	+22	+44	[4]	+18	[4]
Nonferrous foundries	335	+17	+23	+51	−14	+22	−28
Miscellaneous primary metal industries	299	+8	+13	+24	+108	+9	+130
Iron and steel forgings	135	+7	+10	+20	+79	+9	+68
Wire drawing	41	+8	+17	+22	[4]	+4	[4]
Welded and heavy-riveted pipe	28	+1	+2	−1	[4]	−2	[4]
Cold-finished steel	42	+11	+19	+66	[4]	+39	[4]
Primary metal industries, not elsewhere classified	53	+23	+30	+38	[4]	+6	[4]
Fabricated metal products [5]	2,768	+9	+13	+20	+23	[3] +5	[3] +13
Tin cans and other tinware	93	+10	+13	+16	+152	+3	+116
Cutlery, hand tools, and hardware	413	+10	+15	+27	+1	+12	−14
Cutlery and edge tools	100	+1	+5	+37	−9	+31	−10
Hand tools, files, and saws	160	+2	+7	+18	−39	+10	−43
Hardware	153	+17	+22	+29	+28	+5	+7
Heating and plumbing equipment	350	+15	+22	+40	+28	+13	+7
Sanitary ware and plumbers' supplies	109	+16	+24	+55	−19	+25	−38
Oil burners, heating and cooking apparatus	241	+15	+21	+32	+52	+10	+22
Fabricated structural metal products	852	+3	+3	+1	+22	−2	+28
Structural steel and ornamental metalwork	437	+6	+4	+2	+28	−1	+25
Metal doors, sash, frame, and trim	53	+11	+11	+31	[4]	+17	[4]
Boiler-shop products	241	−3	[2]	−7	−7	−7	−5
Sheet-metal work	121	+6	+4	+2	+45	−2	+53
Metal stamping, coating, and engraving [5]	481	+12	+17	+33	+29	+13	+7
Stamped and pressed metal products	352	+12	+17	+32	+18	+14	+3
Metal coating and engraving	102	+8	+11	+20	+21	+8	+4
Fabricated wire products	164	+6	+11	+18	+86	+6	+72
Miscellaneous fabricated metal products	415	+9	+14	+17	−10	[2]	−20
Metal barrels, drums, kegs, and pails	25	+9	+10	+19	[4]	+9	[4]
Steel springs	26	−18	−13	+32	[4]	+52	[4]
Bolts, nuts, washers, and rivets	87	+8	+17	+28	[4]	+10	[4]
Screw-machine products	149	+17	+26	+9	−30	−14	−41
Fabricated metal products, not elsewhere classified	128	+15	+16	+8	−31	−7	−43

See footnotes at end of table.

TABLE B.—Changes in exposure, disabling injuries, and injury rates for 42,171 identical establishments, 1949–50—Continued

Industry	Number of establishments reporting	Percent of change in—					
		Employees	Employee-hours worked	Disabling injuries	Total time lost [1]	Frequency rate	Severity rate [1]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Manufacturing—Continued							
Machinery (except electrical)	2,938	+5	+8	+7	−2	[2]	[3] −11
Engines and turbines	59	+1	+3	−3	−65	−5	−67
Agricultural machinery and tractors	201	−3	−3	−11	−27	−8	−23
Construction and mining machinery	265	+4	+7	+17	+52	+10	+45
Metalworking machinery	619	+7	+15	+21	+55	+6	+35
Special-industry machinery	567	−1	+3	−1	−22	−4	−23
Food-products machinery	132	[2]	+2	+18	+118	+15	+106
Textile machinery	119	−4	[2]	−11	+48	−12	+43
Miscellaneous special-industry machinery	316	+1	+4	−2	−46	−5	−45
General industrial machinery	491	+2	+4	−4	−16	−7	−24
Pumps and compressors	100	+3	+1	−4	−22	−5	−27
Elevators, escalators, and conveyors	72	−4	−3	−28	−80	−25	−79
Mechanical power-transmission equipment (except ball and roller bearings)	99	+8	+13	+7	−18	−5	−25
Miscellaneous general industrial machinery	220	−1	+4	+7	+44	+3	+34
Commercial and household machinery	243	+13	+16	+35	+29	+17	+9
Miscellaneous machinery parts	493	+11	+15	+24	+10	+7	−7
Valves and fittings	82	+3	+7	+5	−32	−2	−36
Fabricated pipe and fittings	20	−5	−4	+17	[4]	+23	[4]
Ball and roller bearings	52	+24	+28	+43	+42	+12	+9
Machine shops, general	339	+2	+6	+26	−30	+18	−32
Electrical machinery	839	+11	+12	+21	+4	[3] +8	[3] +25
Electrical industrial apparatus	414	+3	+4	+14	−13	+10	−10
Electrical appliances	54	+12	+14	+18	−27	+3	−30
Insulated wire and cable	34	+12	+14	+32	[4]	+17	[4]
Electrical equipment for vehicles	33	+19	+25	−13	[4]	−30	[4]
Electric lamps (bulbs)	29	+7	+11	+13	[4]	[2]	[4]
Communication equipment	205	+20	+23	+51	+118	+21	+62
Radios and related products	164	+40	+43	+86	+133	+30	+54
Radio tubes	4	+26	+39	+102	[4]	+44	[4]
Miscellaneous communication equipment	37	−16	−16	−15	[4]	[2]	[4]
Miscellaneous electrical products	70	−6	−3	−6	+12	−1	+42
Batteries	42	−12	−9	−14	[4]	−7	[4]
Electrical products, not elsewhere classified	28	+7	+9	+38	[4]	+27	[4]
Transportation equipment	780	+7	+11	−3	−14	[3] −12	[3] −24
Motor vehicles and equipment	390	+8	+14	[2]	−8	−12	−18
Motor vehicles, bodies, and trailers	215	+8	+13	−1	−8	−13	−17
Motor-vehicle parts and accessories	175	+9	+17	+2	−7	−13	−19
Aircraft and parts	85	+13	+16	+7	+18	−9	−9
Aircraft	22	+9	+10	+8	+10	−2	−6
Aircraft parts	63	+24	+30	+5	+40	−19	−17
Ship and boat building and repairing	204	−18	−17	−11	−41	+9	−32
Shipbuilding and repairing	125	−19	−17	−13	−40	+5	−28
Boatbuilding and repairing	79	+1	+3	+19	[4]	+15	[4]
Railroad equipment	81	−7	−7	−24	−30	−18	−30
Miscellaneous transportation equipment	20	+5	+8	+28	+12	+18	+3
Instruments and related products	343	+5	+7	+4	−9	[3] −4	[3] −3
Scientific instruments	31	+14	+13	+35	[4]	+21	[4]
Mechanical measuring and controlling instruments	91	+18	+21	+19	+197	−1	+138
Optical instruments and lenses	28	−4	−2	−7	[4]	−5	[4]
Medical instruments and supplies	93	+7	+8	−10	−66	−17	−70
Ophthalmic goods	21	−5	−5	−18	[4]	−15	[4]
Photographic equipment and supplies	47	−3	+1	+16	[4]	+15	[4]
Watches and clocks	32	+2	+1	−7	[4]	−9	[4]
Miscellaneous manufacturing industries	764	+6	+8	+23	+14	[3] +13	[3] +31
Jewelry, silverware, and plated ware	80	−2	+3	+8	[4]	+5	[4]
Fabricated plastics products	106	+20	+21	+46	+90	+21	+58
Brooms and brushes	66	+10	+14	+27	−66	+11	−70
Morticians' goods	88	+8	+12	+25	−70	+12	−73
Miscellaneous manufacturing	424	+4	+6	+17	+81	+11	+67
Ordnance and accessories	20	−14	−12	−24	[4]	−13	[4]
Nonmanufacturing							
Construction	2,905	[4]	+1	+2	−2	+1	−3
General contractors	1,601	[4]	−2	−1	−3	[2]	−1
General building contractors	948	[4]	−4	−1	−12	+3	−8
Heavy construction, except highway and street	241	[4]	−7	−4	+14	+3	+22
Highway and street construction	412	[4]	+10	+2	−14	−7	−22

See footnotes at end of table.

TABLE B.—Changes in exposure, disabling injuries, and injury rates for 42,171 identical establishments, 1949–50—Continued

Industry	Number of establishments reporting	Percent of change in—					
		Employees	Employee-hours worked	Disabling injuries	Total time lost [1]	Frequency rate	Severity rate [1]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Nonmanufacturing—Continued							
Construction—Continued							
Special-trade contractors	1,304	[4]	+8	+14	+1	+6	−6
Plumbing, heating, and air conditioning	325	[4]	+9	+14	+98	+4	+80
Painting, paperhanging, and decorating	156	[4]	−3	+34	[4]	+37	[4]
Electrical work	211	[4]	+10	+10	+58	[2]	+44
Masonry, stone setting, and other stone work	67	[4]	+19	+52	[4]	+28	[4]
Plastering and lathing	60	[4]	+12	+11	+8	[2]	−2
Terrazzo, tile, marble, and mosaic work	48	[4]	+4	−32	[4]	−35	[4]
Roofing and sheet-metal work	141	[4]	+1	+32	−53	+32	−54
Structural-steel erection and ornamental ironwork	33	[4]	+13	+29	−13	+14	−23
Installation or erection of building equipment, not elsewhere classified	18	[4]	+63	+9	[4]	−33	[4]
Special-trade contractors, other	245	[4]	[2]	−3	+11	−3	+11
Communication:							
Telephone (wire and radio)	105	−3	−2	−10	−15	−5	−13
Radio broadcasting and television	372	+3	+3	+56	[4]	+53	[4]
Transportation [5]	808	−6	−7	−10	+11	−3	+20
Stevedoring	43	[4]	−15	−12	−31	+3	−19
Streetcar	14	−7	−11	+10	+76	+25	+100
Bus (local)	230	−4	−6	−21	−7	−16	−1
Local transportation systems, integrated	37	−7	−8	−12	+40	−4	+52
Trucking and hauling (local)	306	+6	+7	+17	+185	+9	+167
Warehousing and storage	150	−8	−8	−19	−9	−12	−2
Heat, light, and power [5]	549	+2	+2	−10	−14	−13	−16
Electric light and power	350	+3	+2	−8	−13	−10	−15
Gas	186	+1	+1	−14	−19	−15	−20
Waterworks	128	+7	+1	+3	+33	+1	+31
Personal services	1,910	−3	−4	+6	−24	+11	−20
Dry cleaning	465	−2	[2]	+50	[4]	+49	[4]
Laundries	460	−2	−3	+7	−46	+10	−44
Laundry with dry cleaning	426	−1	−3	−4	−17	−1	−15
Amusements and related services	82	−1	−4	−31	[4]	−28	[4]
Hotels	283	−6	−8	+8	−5	+17	+4
Medical and other professional services	121	−1	[2]	+30	[4]	+33	[4]
Miscellaneous personal services	73	−1	−1	+23	[4]	+24	[4]
Business services	1,712	[2]	[2]	−4	+129	−5	+133
Banks and other financial agencies	673	−1	[2]	−6	+152	−4	+158
Insurance	358	[2]	[2]	−9	+35	−5	+29
Real estate	155	−1	−1	−12	[4]	−12	[4]
Miscellaneous business services	192	+3	+2	+7	+288	+5	+282
Automobile repair shops and garages	164	+4	+2	+16	[4]	+15	[4]
Miscellaneous repair services	170	+13	+5	−13	[4]	−17	[4]
Educational services	175	−1	+1	+11	+11	+11	+10
Fire departments	195	+2	−1	+6	−20	+7	−20
Police departments	139	+9	+6	+18	−23	+11	−27
Trade	6,070	[2]	+1	+10	+2	[3] +9	[3] +8
Wholesale distributors	1,857	+1	+2	+14	−10	+12	−12
Retail, general merchandise	334	−3	−1	−1	+12	[2]	+12
Retail food	449	+1	+3	+21	+85	+18	+83
Wholesale and retail dairy products	306	+2	+1	+11	−8	+10	−9
Retail automobiles and accessories	604	+6	+5	+11	+84	+6	+78
Filling stations	115	+6	+9	+138	[4]	+120	[4]
Retail apparel and accessories	436	+2	+2	+3	[4]	[2]	[4]
Eating and drinking places	271	+3	+2	+3	[4]	+1	[4]
Wholesale and retail building supplies	502	−1	−3	+11	−21	+14	−18
Miscellaneous retail stores	957	+2	+2	+3	+229	[2]	+222
Wholesale and retail trade combined, not elsewhere classified	239	−1	[2]	−6	−86	−6	−86

[1] Based on reports which furnished details regarding the resulting disabilities, constituting approximately 50 percent of the total sample. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

[2] Change was less than 0.5 percent.

[3] Weighted according to estimates of total employment in each industry.

[4] Not available.

[5] Totals include data for industries not shown separately, because of insufficient coverage.

TABLE C.—Distribution of all reported injuries resulting in permanent-partial disability, according to part of body affected, by industry, 1950

Industry	Total	Percent of permanent-partial disability cases involving the loss, or loss of use of—						
		An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	Other and unclassified
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manufacturing								
Total, manufacturing [1]	100	3	79	3	7	4	(2)	4
Food and kindred products [1]	100	7	73	5	7	3	1	4
Meat products	100	10	75	3	3	3	0	6
Canning and preserving	100	5	75	5	3	2	2	8
Grain-mill products	100	8	64	8	8	2	2	8
Bakery products	100	11	78	3	3	1	0	4
Beverages	100	4	60	10	19	5	1	1
Textile-mill products [1]	100	6	74	5	9	3	(2)	3
Cotton yarn and textiles	100	4	82	3	5	5	0	1
Woolen and worsted textiles	100	12	69	2	5	5	2	5
Dyeing and finishing textiles	100	10	60	6	9	4	0	11
Carpets, rugs, and other floor coverings	100	7	70	8	14	0	0	1
Lumber and wood products (except furniture) [1]	100	3	73	5	6	6	(2)	7
Logging	100	9	41	13	9	11	2	15
Sawmills and planing mills [1]	100	4	67	6	6	6	1	10
Planing mills	100	2	61	9	7	5	2	14
Sawmills	100	3	70	3	6	5	0	13
Sawmills and planing mills, integrated	100	7	66	7	5	8	0	7
Millwork and related products	100	1	91	1	1	3	0	3
Wooden containers	100	0	90	0	3	5	0	2
Miscellaneous wood products	100	0	82	4	8	4	0	2
Furniture and fixtures [1]	100	2	91	1	2	2	0	2
Household furniture	100	2	91	1	1	3	0	2
Paper and allied products [1]	100	4	79	2	5	1	0	9
Pulp, paper, and paperboard mills	100	5	76	0	5	2	0	12
Paperboard containers and boxes	100	4	80	2	5	1	0	8
Printing, publishing, and allied industries [1]	100	2	84	4	6	1	0	3
Newspapers and periodicals	100	2	76	8	8	2	0	4
Miscellaneous printing and publishing	100	2	90	0	5	0	0	3
Chemicals and allied products	100	7	68	2	6	9	0	8
Rubber products	100	3	88	1	2	3	0	3
Leather and leather products	100	0	86	2	7	2	0	3
Stone, clay, and glass products [1]	100	6	68	3	10	6	0	7
Glass and glass products	100	9	68	4	7	6	0	6
Structural clay products	100	2	62	4	16	8	0	8
Miscellaneous nonmetallic mineral products	100	7	77	0	7	2	0	7
Primary metal industries [1]	100	2	76	3	9	6	1	3
Blast furnaces and steel mills	100	2	74	4	10	7	0	3
Iron and steel foundries [1]	100	2	71	3	12	9	0	3
Gray-iron and malleable foundries	100	1	69	4	12	11	0	3
Nonferrous rolling, drawing, and alloying	100	6	82	4	4	2	0	2
Miscellaneous primary metal industries [1]	100	2	74	2	8	5	4	5
Iron and steel forgings	100	2	77	4	2	4	7	4
Fabricated metal products [1]	100	2	85	2	6	2	(2)	3
Tin cans and other tinware	100	0	96	0	4	0	0	0
Cutlery, hand tools, and hardware [1]	100	1	89	1	3	3	0	3
Hardware	100	2	87	2	2	2	0	5
Heating and plumbing equipment	100	1	89	1	6	2	1	0
Sanitary ware and plumbers' supplies	100	0	98	0	0	2	0	0
Oil burners, heating and cooking apparatus	100	1	85	2	9	2	1	0
Fabricated structural metal products [1]	100	4	64	5	13	4	0	10
Structural steel and ornamental metalwork	100	4	60	4	14	3	0	15
Boiler-shop products	100	6	61	8	13	8	0	4
Metal stamping, coating, and engraving [1]	100	2	92	1	2	0	1	2
Stamped and pressed metal products	100	2	93	0	2	0	1	2
Miscellaneous fabricated metal products [1]	100	1	88	1	8	2	0	0

See footnotes at end of table.

TABLE C.—Distribution of all reported injuries resulting in permanent-partial disability, according to part of body affected, by industry, 1950—Continued

Industry	Total	Percent of permanent-partial disability cases involving the loss, or loss of use of—						
		An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	Other and unclassified
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manufacturing—Continued								
Machinery (except electrical) [1]	100	2	82	2	9	3	0	2
Agricultural machinery and tractors	100	3	83	0	7	7	0	0
Construction and mining machinery	100	2	75	6	10	6	0	1
Metalworking machinery	100	2	89	2	2	4	0	1
Special-industry machinery	100	1	69	1	24	2	0	3
General industrial machinery [1]	100	6	70	4	17	2	0	1
Pumps and compressors	100	6	61	8	23	2	0	0
Commercial and household machinery	100	1	90	3	1	2	0	3
Miscellaneous machinery parts	100	1	90	0	0	3	0	6
Electrical machinery [1]	100	1	85	2	7	2	0	3
Electrical industrial apparatus	100	0	85	2	7	4	0	2
Electrical appliances	100	2	79	0	15	2	0	2
Communication equipment [1]	100	0	89	4	3	0	0	4
Radios and related products	100	0	85	4	4	0	0	7
Transportation equipment [1]	100	2	79	3	5	5	[2]	6
Motor vehicles and equipment	100	2	80	1	5	5	[2]	7
Motor vehicles, bodies, and trailers	100	1	77	1	4	7	[2]	10
Motor-vehicle parts and accessories	100	2	86	1	6	2	0	3
Aircraft and parts	100	1	85	10	2	2	0	0
Aircraft	100	2	85	9	2	2	0	0
Aircraft parts	100	0	84	12	2	2	0	0
Ship and boat building and repairing [1]	100	3	70	6	4	8	1	8
Shipbuilding and repairing	100	3	67	6	5	8	2	9
Railroad equipment	100	4	76	2	14	2	0	2
Instruments and related products	100	0	92	2	6	0	0	0
Miscellaneous manufacturing industries	100	4	89	0	3	2	1	1
Nonmanufacturing								
Construction [1]	100	7	55	7	12	6	1	12
General contractors	100	7	57	6	11	6	1	12
General building contractors	100	6	63	6	7	8	1	9
Heavy construction, except highway and street	100	5	55	6	12	4	1	17
Highway and street construction	100	14	50	8	14	6	1	7
Special-trade contractors	100	8	51	10	14	6	0	11
Transportation [1]	100	7	55	9	18	4	[2]	7
Stevedoring	100	8	51	8	28	0	0	5
Local transportation systems, integrated	100	9	46	18	18	7	0	2
Trucking and hauling	100	5	46	15	10	5	2	17
Warehousing and storage	100	8	63	4	18	2	0	5
Heat, light, and power [1]	100	7	48	13	15	5	[2]	12
Electric light and power	100	9	49	12	14	3	[2]	13
Gas	100	3	46	14	18	11	0	8
Trade [1]	100	6	69	6	7	4	0	8
Wholesale distributors	100	6	64	4	12	6	0	8
Wholesale and retail building supplies	100	5	79	0	10	3	0	3

[1] Totals include data for industries not shown separately.

[2] Less than 0.5 percent.

TABLE D.—Distribution of temporary-total disabilities,[1] by duration of disability, 1950

Industry	Number of cases [2]	Percent of cases resulting in—		Total days lost [2]	Percent of total days lost accruing from—	
		1, 2, or 3 days of disability	4 or more days of disability		1-, 2-, or 3-day cases	4-or-more-day cases
	(1)	(2)	(3)	(4)	(5)	(6)
Manufacturing						
Total, manufacturing [3]	101,975	35.7	64.3	1,550,799	4.4	95.6
Food and kindred products:						
Meat products	2,773	41.5	58.5	29,849	7.4	92.6
Dairy products	390	39.7	60.3	5,393	5.6	94.4
Canning and preserving	1,873	35.4	64.6	27,462	4.8	95.2
Grain-mill products	1,287	35.1	64.9	20,433	4.2	95.8
Bakery products	1,606	33.9	66.1	25,270	4.0	96.0
Sugar	1,049	32.7	67.3	14,622	4.5	95.5
Cane sugar	408	21.8	78.2	8,326	2.0	98.0
Beet sugar	641	39.6	60.4	6,296	7.6	92.4
Confectionery and related products	873	36.3	63.7	12,005	4.8	95.2
Beverages [3]	2,707	29.6	70.4	45,257	3.3	96.7
Bottled soft drinks	261	46.4	53.6	3,004	7.6	92.4
Malt and malt liquors	2,112	28.2	71.8	34,995	3.2	96.8
Distilled liquors	256	21.1	78.9	5,923	1.6	98.4
Miscellaneous food products	665	36.8	63.2	9,359	4.9	95.1
Tobacco manufacturers	507	34.9	65.1	6,812	4.3	95.7
Textile-mill products:						
Cotton yarn and textiles	2,955	27.3	72.7	54,362	2.9	97.1
Rayon, other synthetic, and silk textiles	1,086	31.9	68.1	17,585	3.6	96.4
Woolen and worsted textiles	1,137	30.2	69.8	22,636	2.9	97.1
Knit goods	831	32.9	67.1	12,108	4.3	95.7
Dyeing and finishing textiles	1,553	33.2	66.8	27,903	2.9	97.1
Carpets, rugs, and other floor coverings	1,374	30.7	69.3	20,556	4.0	96.0
Hats (except cloth and millinery)	348	44.8	55.2	3,835	7.7	92.3
Cordage and twine	282	38.3	61.7	3,726	5.1	94.9
Miscellaneous textile goods	394	34.3	65.7	5,139	5.1	94.9
Apparel and other finished textile products:						
Clothing, men's and boys'	715	47.7	52.3	6,500	9.2	90.8
Clothing, women's and children's	554	54.3	45.7	4,331	10.9	89.1
Miscellaneous fabricated textile products	358	48.6	51.4	3,373	9.7	90.3
Lumber and wood products (except furniture):						
Logging	2,007	24.6	75.4	41,169	2.5	97.5
Sawmills and planing mills [3]	4,249	35.1	64.9	64,639	4.8	95.2
Planing mills	621	38.5	61.5	8,464	5.8	94.2
Sawmills	1,961	36.0	64.0	30,965	4.8	95.2
Sawmills and planing mills, integrated	1,522	32.9	67.1	23,225	4.5	95.5
Millwork and related products	2,211	36.5	63.5	27,584	5.8	94.2
Millwork and structural wood products	917	40.6	59.4	10,085	7.1	92.9
Plywood mills	374	31.3	68.7	6,240	3.8	96.2
Wooden containers	920	34.6	65.4	11,259	5.8	94.2
Miscellaneous wood products	772	29.5	70.5	11,540	3.9	96.1
Furniture and fixtures:						
Household furniture	3,594	39.2	60.8	43,705	6.3	93.7
Household furniture, nonmetal	2,842	39.2	60.8	34,570	6.4	93.6
Metal household furniture	336	37.5	62.5	4,143	5.6	94.4
Mattresses and bedsprings	416	40.9	59.1	4,992	6.1	93.9
Office furniture [3]	323	43.0	57.0	3,613	6.8	93.2
Metal office furniture	223	43.9	56.1	2,634	6.5	93.5
Partitions and fixtures	301	32.6	67.4	5,698	3.2	96.8
Paper and allied products:						
Pulp, paper, and paperboard mills	1,171	31.5	68.5	19,481	3.6	96.4
Envelopes	250	25.6	74.4	3,477	3.4	96.6
Miscellaneous paper and allied products	759	36.2	63.8	9,933	5.4	94.6
Printing, publishing, and allied industries:						
Newspapers and periodicals	1,588	34.9	65.1	23,138	4.7	95.3
Miscellaneous printing and publishing	1,268	39.8	60.2	15,867	6.0	94.0
Chemicals and allied products:						
Industrial inorganic chemicals	231	29.4	70.6	3,807	3.3	96.7
Industrial organic chemicals	569	32.5	67.5	10,220	3.4	96.6
Drugs and medicine	390	37.2	62.8	5,900	4.5	95.5
Soap and related products	210	26.2	73.8	3,586	3.1	96.9
Paints, pigments, and related products	703	43.0	57.0	8,435	6.2	93.8
Fertilizers	701	32.0	68.0	12,998	3.1	96.9
Vegetable and animal oils and fats	218	29.4	70.6	3,408	3.3	96.7
Miscellaneous chemicals and allied products	327	41.6	58.4	4,699	5.7	94.3
Products of petroleum and coal:						
Paving and roofing materials	238	29.8	70.2	4,691	2.7	97.3
Rubber products:						
Tires and inner tubes	256	12.9	87.1	7,957	.8	99.2
Miscellaneous rubber products	1,160	34.3	65.7	26,447	2.7	97.3

See footnotes at end of table.

TABLE D.—Distribution of temporary-total disabilities,[1] by duration of disability, 1950—Continued

Industry	Number of cases [2]	Percent of cases resulting in—		Total days lost [2]	Percent of total days lost accruing from—	
		1, 2, or 3 days of disability	4 or more days of disability		1-, 2-, or 3-day cases	4-or-more-day cases
	(1)	(2)	(3)	(4)	(5)	(6)
Manufacturing—Continued						
Leather and leather products:						
Leather tanning and finishing	827	26.8	73.2	13,906	3.1	96.9
Footwear (except rubber)	596	43.5	56.5	6,678	7.1	92.9
Miscellaneous leather products	255	40.4	59.6	2,824	6.8	93.2
Stone, clay, and glass products:						
Glass and glass products	1,441	30.5	69.5	23,293	3.7	96.3
Structural clay products	2,659	35.6	64.4	33,806	5.4	94.6
Pottery and related products	556	39.0	61.0	7,056	6.0	94.0
Concrete, gypsum, and mineral wool	534	41.0	59.0	6,395	6.5	93.5
Miscellaneous nonmetallic mineral products	586	34.1	65.9	8,245	4.1	95.9
Primary metal industries:						
Blast furnaces and steel mills	2,743	17.9	82.1	91,896	1.1	98.9
Iron and steel foundries	4,381	36.5	63.5	55,051	5.6	94.4
Gray-iron and malleable foundries	3,818	38.0	62.0	45,825	6.0	94.0
Steel foundries	563	26.5	73.5	9,226	3.4	96.6
Nonferrous rolling, drawing, and alloying	603	35.5	64.5	8,596	5.0	95.0
Nonferrous foundries	509	39.1	60.9	7,033	6.1	93.9
Miscellaneous primary metal industries [3]	1,467	32.7	67.3	24,387	3.8	96.2
Iron and steel forgings	765	29.3	70.7	12,555	3.5	96.5
Cold-finished steel	233	43.3	56.7	3,189	6.1	93.9
Fabricated metal products:						
Tin cans and other tinware	348	32.5	67.5	5,405	3.7	96.3
Cutlery, hand tools, and hardware	1,867	34.8	65.2	27,182	4.6	95.4
Cutlery and edge tools	438	44.5	55.5	6,403	5.9	94.1
Hand tools, files, and saws	520	34.4	65.6	7,866	4.4	95.6
Hardware	909	30.4	69.6	12,913	4.1	95.9
Heating and plumbing equipment	2,453	34.1	65.9	31,863	4.7	95.3
Sanitary ware and plumbers' supplies	904	35.1	64.9	12,892	4.2	95.8
Oil burners, heating and cooking apparatus	1,549	33.5	66.5	18,971	5.0	95.0
Fabricated structural metal products	3,376	45.2	54.8	46,632	5.7	94.3
Structural steel and ornamental metal work	1,591	44.2	55.8	24,138	5.1	94.9
Metal doors, sash, frame, and trim	446	59.6	40.4	3,292	10.7	89.3
Boiler-shop products	1,097	42.1	57.9	16,084	5.7	94.3
Sheet-metal work	242	39.7	60.3	3,118	5.5	94.5
Metal stamping, coating, and engraving [3]	1,809	34.8	65.2	24,660	4.6	95.4
Stamped and pressed metal products	1,125	32.3	67.7	15,561	4.3	95.7
Metal coating and engraving	484	42.4	57.6	5,952	5.7	94.3
Fabricated wire products	603	30.3	69.7	9,048	4.1	95.9
Miscellaneous fabricated metal products [3]	1,234	35.9	64.1	17,420	4.8	95.2
Bolts, nuts, washers, and rivets	240	35.0	65.0	3,356	4.3	95.7
Screw-machine products	298	39.3	60.7	3,360	6.3	93.7
Fabricated metal products, not elsewhere classified	455	38.2	61.8	7,214	4.7	95.3
Machinery (except electrical):						
Engines and turbines	400	33.0	67.0	5,678	4.7	95.3
Agricultural machinery and tractors	1,163	37.3	62.7	14,653	5.9	94.1
Construction and mining machinery	1,593	43.6	56.4	20,228	5.9	94.1
Metalworking machinery	1,201	41.1	58.9	17,189	5.1	94.9
Special-industry machinery	2,002	39.8	60.2	29,196	4.9	95.1
Food-products machinery	316	34.8	65.2	4,722	4.3	95.7
Textile machinery	534	37.6	62.4	9,460	3.9	96.1
Miscellaneous special-industry machinery	1,152	42.1	57.9	15,014	5.8	94.2
General industrial machinery	1,717	35.5	64.5	23,561	5.0	95.0
Pumps and compressors	418	37.8	62.2	5,201	6.1	93.9
Elevators, escalators, and conveyors	298	36.6	63.4	3,895	5.1	94.9
Mechanical power-transmission equipment (except ball and roller bearings)	239	38.5	61.5	3,687	4.9	95.1
Miscellaneous general industrial machinery	762	32.9	67.1	10,778	4.5	95.5
Commercial and household machinery	1,184	32.4	67.6	18,029	3.8	96.2
Miscellaneous machinery parts [3]	1,852	33.5	66.5	29,859	4.0	96.0
Valves and fittings	405	28.6	71.4	8,815	2.6	97.4
Ball and roller bearings	852	36.4	63.6	11,531	5.0	95.0
Machine shops, general	483	32.1	67.9	8,278	3.7	96.3
Electrical machinery:						
Electrical industrial apparatus	1,840	36.5	63.5	25,435	4.9	95.1
Electrical appliances	312	26.3	73.7	4,649	3.6	96.4
Insulated wire and cable	305	33.8	66.2	5,114	3.6	96.4
Communication equipment [3]	759	46.6	53.4	9,752	6.8	93.2
Radios and related products	444	44.1	55.9	5,075	7.1	92.9
Miscellaneous communication equipment	252	50.0	50.0	3,790	6.6	93.4
Miscellaneous electrical products	224	39.3	60.7	2,502	6.5	93.5
Transportation equipment:						
Motor vehicles and equipment	1,572	41.5	58.5	18,853	6.6	93.4
Motor vehicles, bodies, and trailers	670	44.8	55.2	8,228	6.6	93.4
Motor-vehicle parts and accessories	902	39.0	61.0	10,625	6.5	93.5
Aircraft and parts	1,056	37.8	62.2	18,284	4.2	95.8
Aircraft	360	23.6	76.4	7,161	2.1	97.9
Aircraft parts	696	45.1	54.9	11,123	5.6	94.4

See footnotes at end of table.

TABLE D.—Distribution of temporary-total disabilities,[1] by duration of disability, 1950—Continued

Industry	Number of cases [2]	Percent of cases resulting in—		Total days lost [2]	Percent of total days lost accruing from—	
		1, 2, or 3 days of disability	4 or more days of disability		1-, 2-, or 3-day cases	4-or-more-day cases
	(1)	(2)	(3)	(4)	(5)	(6)
Manufacturing—Continued						
Transportation equipment—Continued						
Ship and boat building and repairing [3]	1,190	56.5	43.5	20,475	5.4	94.6
Shipbuilding and repairing	1,026	54.3	45.7	18,947	4.9	95.1
Railroad equipment	565	35.0	65.0	25,255	1.4	98.6
Instruments and related products:						
Mechanical measuring and controlling instruments	378	32.3	67.7	5,431	4.4	95.6
Medical instruments and supplies	524	55.0	45.0	4,099	13.8	86.2
Miscellaneous manufacturing industries:						
Jewelry, silverware, and plated ware	248	45.2	54.8	3,513	5.5	94.5
Fabricated plastics products	513	45.0	55.0	5,764	7.1	92.9
Brooms and brushes	229	45.0	55.0	3,022	5.6	94.4
Morticians' goods	285	31.6	68.4	4,156	4.6	95.4
Miscellaneous manufacturing	1,213	38.5	61.5	15,200	5.7	94.3
Nonmanufacturing						
Construction:						
General contractors	11,182	46.6	53.4	148,570	7.0	93.0
General building contractors	5,844	45.7	54.3	71,978	7.0	93.0
Heavy construction, except highway and street	2,772	47.2	52.8	48,813	6.1	93.9
Highway and street construction	2,566	48.0	52.0	27,779	8.6	91.4
Special-trade contractors [3]	3,766	48.7	51.3	46,342	7.8	92.2
Plumbing, heating, and air conditioning	798	50.8	49.2	7,864	9.6	90.4
Electrical work	468	52.6	47.4	6,641	6.5	93.5
Masonry, stone setting, and other stonework	248	46.4	53.6	2,858	8.9	91.1
Plastering and lathing	254	49.2	50.8	2,492	12.4	87.6
Roofing and sheet-metal work	438	51.4	48.6	4,699	11.4	88.6
Structural-steel erection and ornamental ironwork	495	48.9	51.1	6,414	6.7	93.3
Special-trade contractors, other	728	45.5	54.5	9,844	6.2	93.8
Transportation:						
Stevedoring	1,182	18.4	81.6	40,144	1.2	98.8
Streetcar	270	39.3	60.7	3,752	5.1	94.9
Bus (local)	957	30.4	69.6	16,312	3.4	96.6
Local transportation systems, integrated	4,134	31.8	68.2	69,118	3.6	96.4
Trucking and hauling (local)	1,416	42.5	57.5	16,345	7.2	92.8
Warehousing and storage	404	45.5	54.5	6,153	5.5	94.5
Heat, light, and power:						
Electric light and power	5,815	33.1	66.9	103,599	3.7	96.3
Gas	3,337	37.7	62.3	45,226	5.1	94.9
Waterworks	476	32.1	67.9	7,432	3.5	96.5
Personal services:						
Dry cleaning	222	63.5	36.5	1,858	14.9	85.1
Laundries	313	43.1	56.9	4,835	5.6	94.4
Laundry with dry cleaning	493	44.0	56.0	6,788	5.5	94.5
Hotels	1,431	45.8	54.2	16,025	7.4	92.6
Business services:						
Banks and other financial agencies	205	41.5	58.5	2,463	7.4	92.6
Insurance	384	41.4	58.6	5,506	5.2	94.8
Miscellaneous business services	360	47.8	52.2	4,643	6.0	94.0
Educational services	1,564	46.2	53.8	19,425	6.8	93.2
Fire departments	2,646	38.9	61.1	38,448	5.7	94.3
Police departments	1,362	32.5	67.5	21,538	3.9	96.1
Trade:						
Wholesale distributors	3,265	50.5	49.5	34,134	9.6	90.4
Retail, general merchandise	1,093	40.9	59.1	14,873	5.4	94.6
Retail food	1,088	46.5	53.5	12,959	7.2	92.8
Wholesale and retail dairy products	1,838	30.4	69.6	26,759	3.8	96.2
Retail automobiles and accessories	920	53.8	46.2	10,112	9.3	90.7
Retail apparel and accessories	238	39.5	60.5	3,118	5.4	94.6
Eating and drinking places	395	45.3	54.7	4,342	8.3	91.7
Wholesale and retail building supplies	1,254	43.3	56.7	15,860	6.5	93.5
Miscellaneous retail stores	933	46.9	53.1	13,144	6.0	94.0
Wholesale and retail trade combined, not elsewhere classified	295	40.0	60.0	4,099	5.5	94.5

[1] Any injury which does not result in death or permanent impairment but which renders the injured person unable to perform a regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any one or more days after the day of injury is designated as a temporary-total disability.

[2] Based on reports from those establishments which were able to supply the requested breakdown.

[3] Total includes data for industries not shown separately.

TABLE E.—Indexes of injury-frequency rates in manufacturing, 1926–50, by extent of disability [1]

[1926=100]

Year	All injuries	Death and permanent-total disability	Permanent-partial disability	Temporary-total disability	Year	All injuries	Death and permanent-total disability	Permanent-partial disability	Temporary-total disability
1926	100.0	100.0	100.0	100.0	1939	73.4	71.4	80.7	73.9
1927	93.6	107.1	96.3	93.3	1940	75.3	71.4	84.8	75.6
1928	93.2	107.1	104.6	92.5	1941	85.8	80.3	93.7	86.2
1929	99.2	92.9	109.2	98.7	1942	93.5	70.7	83.4	94.1
1930	95.5	107.1	111.0	94.6	1943	94.4	70.7	83.4	95.0
1931	78.0	92.9	102.8	76.5	1944	88.3	62.8	75.4	89.7
1932	80.9	107.1	113.8	78.9	1945	81.9	62.8	72.3	83.0
1933	91.8	85.7	110.1	90.8	1946	84.3	60.1	77.9	85.3
1934	93.6	107.1	128.4	91.6	1947	78.4	51.7	70.1	79.3
1935	88.1	92.9	121.1	86.2	1948	69.8	51.7	67.3	70.6
1936	85.7	85.7	114.7	84.1	1949	61.2	44.3	61.9	61.6
1937	85.8	85.7	122.0	83.7	1950	61.8	44.3	61.3	62.2
1938	71.7	71.4	78.9	68.1					

[1] Beginning with 1937, the indexes are based on the percent of change of the frequency rates of identical establishments in each pair of successive years.

TABLE F.—Changes in industry classification for work-injury survey (manufacturing industries)

Former industry title [1]	S. I. C. code (1942 edition)[2]	New comparable industry title [1]	S. I. C. code (1945 edition)[2]	Changes in industry definition
Apparel and other finished textile products	23	**Same**	23	**No change.**
Clothing, men's and boys'	231, 232, 23X	Same	231, 232	No change.
Clothing, women's and children's	233, 234, 236	Same	233, 234, 236	No change.
Millinery	235	Same	235	No change.
Apparel and accessories, n. e. c	237, 238	Fur goods and miscellaneous apparel	237, 238	No change.
Trimmings and fabricated textile products, n. e. c.	23V, 239	Miscellaneous fabricated textile products	239 (except 2399P)	No change. (Sponging and shrinking of cloth for the trade, 2399P—is included in "Dyeing and finishing textiles" (Group 22) in both the new and old series.)
Chemicals and allied products	28, 29	**Chemicals and allied products**	28	**Broken down into 2 separate industry groups; several products were transferred to other industry groups (see below).**
		Products of petroleum and coal	29	
Compressed and liquefied gases	2886	Same	2896	No change.
Drugs, toiletries, and insecticides	2831–2833	Drugs and medicines	283	Includes medicinal chemicals, transferred from "Industrial chemicals." Perfumes, cosmetics, and other toilet preparations; insecticides and fungicides, household insecticides and repellants, such as fly spray, rat, ant, and roach poisons, and moth repellants, were transferred to "Miscellaneous chemicals and allied products."
Explosives	2884, 2897	Same	2826	Fireworks and pyrotechnics were transferred to "Miscellaneous manufacturing."
Fertilizers	287	Same	287	Incomplete fertilizer materials (except superphosphate) were transferred to "Industrial inorganic chemicals."
Industrial chemicals	2834, 2881, 2882, 2885, 2887–2889	Industrial inorganic chemicals	281	New industry, broken out of "Industrial chemicals"; also includes incomplete fertilizer materials (except superphosphate), transferred from "Fertilizers."
		Miscellaneous industrial organic chemicals	2821, 2822, 2829	New industry, broken out of "Industrial chemicals"; also includes organic lakes, toners, and colors, transferred from "Paints, varnishes, and colors."
				The following products were transferred to other industries: ester gum, to "Plastics, except synthetic rubber"; coal-tar medicinals, to "Drugs and medicines"; sulfonated oils and assistants, to "Soap and related products"; fatty acids, to "Vegetable and animal oils and fats"; natural dyeing and tanning materials; bone, carbon, and lamp black; salt; rosin, gum, and dextrine sizes; agricultural, industrial, and household disinfectants and deodorants; industrial compounds, such as boiler and insulating compounds, metal-, oil-, and water-treating and water-proofing compounds, and chemical supplies for foundries—to "Miscellaneous chemicals and allied products"; electrometallurgical products—high-percentage ferro-alloys and nonferrous additive alloys, to "Blast furnaces and steel mills" (Group 33.)
Paints, varnishes, and colors	281	Paints, pigments, and related products	285	Organic lakes, toners, and colors were transferred to "Miscellaneous industrial organic chemicals."
Paving and roofing materials	293	Same	295	Industry transferred to Group 29. Includes mastic floor composition, transferred from "Concrete, gypsum, and plaster products" (Group 32).
Petroleum refining	291	Same	291	Industry transferred to Group 29. No change. (Data compiled by Bureau of Mines, U. S. Department of the Interior).
Plastic materials, except rubber	2883P	Plastics, except synthetic rubber	2823	Includes ester gum, transferred from "Industrial chemicals."
Soap and glycerin	284	Soap and related products	284	Includes sulfonated oils and assistants, transferred from "Industrial chemicals"; and cleaning and polishing preparations, transferred from "Chemical products, n. e. c."
Synthetic rubber	2883P	Same	2824	No change.
Synthetic textile fibers	285	Synthetic fibers	2825	No change.
Vegetable and animal oils	282	Vegetable and animal oils and fats	288	Includes fatty acids, transferred from "Industrial chemicals"; grease and tallow, transferred from "Chemical products, n. e. c." Essential oils were transferred to "Miscellaneous chemicals and allied products."
Chemical products, n. e. c	286, 2891, 2893–2896, 2898, 2899, 299	Miscellaneous chemicals and allied products.	286, 2891–2895, 2897–2899	Includes natural dyeing and tanning materials; bone, carbon, and lamp black; salt; rosin, gum, and dextrine sizes; agricultural, industrial, and household disinfectants and deodorants; industrial compounds, such as boiler and insulating compounds, metal-, oil-, and water-treating and water-proofing compounds, and chemical supplies for foundries—transferred from "Industrial chemicals"; essential oils, transferred from "Vegetable and animal oils"; perfumes, cosmetics, and other toilet preparations; agricultural insecticides and fungicides and household insecticides and repellants—transferred from "Drugs, toiletries, and insecticides." The following were transferred to other industries: Industrial starches, to "Miscellaneous food products" (Group 20); cleaning and polishing preparations, to "Soap and related products"; grease and tallow, to "Vegetable and animal oils and fats"; fuel briquets and packaged fuel, lubricating oils and greases not made in petroleum refineries, and products of petroleum and coal not elsewhere classified, to "Miscellaneous products of petroleum and coal" (Group 29); candles, to "Miscellaneous manufacturing" (Group 39).
		Miscellaneous products of petroleum and coal.	299	New industry, assigned to Group 29. Includes fuel briquets and packaged fuel, lubricating oils and greases not made in petroleum refineries, and products of petroleum and coal, not elsewhere classified—transferred from "Chemicals products, n. e. c."

Electrical machinery, equipment, and supplies	36	**Electrical machinery**	36	**A few products were transferred to other industry groups (see below).**
Automotive electrical equipment	364	Electrical equipment for vehicles	364	No change.
Batteries	3691	Same	3691, 3692	No change.
Communication and signaling equipment, except radio.	3662	Miscellaneous communication equipment	3664, 3669	No change.
Electrical appliances	362	Same	362	Vacuum cleaners were transferred to "Commercial and household machinery" (Group 35).
Electric equipment for industrial use	361	Electrical industrial apparatus	361	Electric industrial furnaces were transferred to "Miscellaneous general industrial machinery" (Group 35).
Electric lamps (bulbs)	365	Same	365	No change.
Insulated wire and cable	363	Same	363	No change. (However, under former definition many establishments drawing as well as insulating wire were included in this industry; under a clarifying clause in the present definition such establishments are classified under "Wiredrawing" (Group 33).
Radios and phonographs	3661	Radios and related products	3661	Radios tubes and phonograph records were transferred to new industries.
		Radio tubes	3662	New industry, transferred from "Radios and phonographs."
		Phonograph records	3663	New industry, transferred from "Radios and phonographs."
Electrical equipment, n. e. c.	3692, 3699	Electrical products, n. e. c.	3693, 3699	No change.
Food products	20	**Food and kindred products**	20	**Only one minor change (see below).**
Baking	205	Bakery products	205	No change.
Bottling, soft drinks	2081	Bottled soft drinks	2081	No change.
Breweries	2082, 2083	Malt and malt liquors	2082, 2083	No change.
Canning and preserving	203	Same	203	No change.
Confectionery	207	Confectionery and related products	207	No change.
Dairy products	202	Same	202	No change.
Distilleries	2085	Distilled liquors	2085	No change.
Flour, feed, and grain-mill products	204	Grain-mill products	204	No change.
Slaughtering and meat packing	201	Meat products	201	No change.
Sugar, beet	2063	Same	2063	No change.
Sugar, cane	2061, 2062	Same	2061, 2062	No change.
Wineries	2084	Wines	2084	No change.
Food products, n. e. c.	209	Miscellaneous food products	209	Includes industrial starches, transferred from "Chemical products, n. e. c." (Group 28).
Furniture and finished lumber products	25	**Furniture and fixtures**	25	**Several products were transferred to other industry groups (see below).**
Furniture, metal	2514, 2522 253P	Metal household furniture	2514	New industry, broken out of "Furniture, metal"; also includes metal-frame upholstered furniture, transferred from "Furniture, except metal."
		Metal office furniture	2522	New industry, broken out of "Furniture, metal."
				Metal public building and professional furniture and metal restaurant and other furniture and fixtures were transferred to new industries (see below).
Furniture, except metal	2511–2513, 2519, 2521, 253P	Household furniture, nonmetal	2511–2513, 2519	New industry, broken out of "Furniture, except metal."
		Wood office furniture	2521	New industry, broken out of "Furniture, except metal."
		Public-building and professional furniture	253	New industry, broken out of "Furniture, except metal," and including metal public-building and professional furniture, transferred from "Furniture, metal."
		Miscellaneous furniture and fixtures	259	New industry, broken out of "Furniture, except metal," and including metal restaurant and miscellaneous furniture and fixtures, transferred from "Furniture, metal." Metal-frame upholstered furniture was transferred to "Metal household furniture."
Mattresses and bedsprings	2515	Same	2515	No change.
Morticians' supplies	257	Morticians' goods	3988	No change. Transferred to "Miscellaneous manufacturing industries" (Group 39).
Office, store, and restaurant fixtures	254	Partitions and fixtures	254	No change.
Wooden containers	255	Same	244	No change. Transferred to "Lumber and wood products." (Group 24).
Miscellaneous wood products, n. e. c.	256, 259	Screens, shades, and blinds	256	New industry, broken out of "Miscellaneous wood products, n. e. c."
		Miscellaneous wood products	249	Industry transferred to "Lumber and wood products" (Group 24). The following products were transferred to other industries: Window and door screens, weather strip, window shades, and venetian blinds, to new industry, above; wooden brooders and incubators, to "Agricultural machinery and tractors" (Group 35); excelsior mills, to "Miscellaneous special-product sawmills" (Group 24); cork products and matches, to "Miscellaneous manufacturing" (Group 39).
Iron and steel and their products	33	**Primary metal industries**	33	**Two former industry groups were combined and regrouped. A number of products were transferred to other industries (see below).**
Nonferrous metals and their products	34	**Fabricated metal industries**	34	
Bolts, nuts, washers, and rivets	3391	Same	3494	No change.
Cold-finished steel	3399P	Same	3399P	No change.
Cutlery and edge tools	3351, 3354	Same	3421, 3422	Hand saws and saw blades were transferred to "Hand tools, files, and saws."
Fabricated structural steel	3381	Structural steel and ornamental metalwork.	3441	Includes ornamental metalwork.
Forgings, iron and steel	3392	Same	3391	No change.
Foundries, iron	3321, 3322, 3324	Gray-iron and malleable foundries	3321, 3322	No change.
Foundries, steel	3323	Steel foundries	3323	No change.
Hardware	3359	Same	3429	No change.

See footnotes at end of table.

TABLE F.—Changes in industry classification for work-injury survey (manufacturing industries)—Continued

Former industry title [1]	S. I. C. code (1942 edition)[2]	New comparable industry title [1]	S. I. C. code (1945 edition)[2]	Changes in industry definition
Iron and steel and their products Nonferrous metals and their products } Con.				
Heating equipment, n. e. c.	3362, 3363, 3369	Oil burners, heating and cooking apparatus.	3432, 3439	Includes domestic steam and hot water heating apparatus, cast-iron and nonferrous radiators, complete gas and oil boiler-burner units, transferred from "Steam fittings and apparatus." Metal brooders and incubators were transferred to "Agricultural machinery and tractors" (Group 35).
Iron and steel	331	Blast furnaces and steel mills	331	Includes electrometallurgical products such as high percentage ferro-alloys and nonferrous additive alloys, transferred from "Industrial chemicals" (Group 28).
Metal coating and engraving	3374, 3375, 347	Same	3465–3468	No change.
Ornamental metalwork	3382, 3383	Metal doors, sash, frame, and trim	3442	New industry, broken out of "Ornamental metalwork"; ornamental metalwork was transferred to "Structural steel and ornamental metalwork."
Plate fabrication and boiler-shop products	3364	Boiler-shop products	3443	No change.
Plumbers' supplies	3361	Sanitary ware and plumbers' supplies	3431	No change.
Screw-machine products	3395	Same	3495	No change.
Sheet-metal work	3495	Same	3444	No change.
Stamped and pressed metal products	3372, 3373	Same	3462, 3463	Includes aluminum and other nonferrous stampings, transferred from "Aluminum and magnesium products" and from "Nonferrous metal products, n. e. c."
Steam fittings and apparatus	3365, 3366	No comparable industry	----------	Domestic steam and hot water heating apparatus, cast-iron and nonferrous radiators, complete gas and oil boiler-burner units were transferred to "Oil burners, heating and cooking apparatus." Steam valves, fittings, and specialties were transferred to "Valves and fittings" (Group 35). Thermostats, temperature control devices, gages and regulators were transferred to "Mechanical measuring and controlling instruments" (Group 38).
Steel barrels, kegs, drums, and packages	3396	Metal barrels, drums, kegs, and pails	3491	Includes aluminum and other nonferrous barrels, drums, kegs, and pails, transferred from "Aluminum and magnesium products," and from "Nonferrous metal products, n. e. c."
Steel springs	3394	Same	3493	No change.
Tin cans and other tinware	333	Same	341	No change.
Tools, except edge tools	3352, 3353	Hand tools, files, and saws	3423–3425	Includes hand saws and saw blades, transferred from "Cutlery and edge tools."
Vitreous-enameled products	3371	Same	3461	No change.
Wire and wire products	334	Wire drawing	3392	New industry, broken out of "Wire and wire products"; also includes manufacturers of insulated wire and cable who draw their own wire.
		Fabricated wire products	348	New industry, broken out of "Wire and wire products."
Wrought pipes, welded and heavy-riveted	3393	Welded and heavy-riveted pipe	3393	No change.
Iron and steel products, n.e.c.	3398, 3399P	No comparable industry	----------	Parts of industry were transferred to "Primary metal products, n.e.c.," and "Fabricated metal products, n.e.c."
Aluminum and magnesium products	344P	No comparable industry	----------	Parts of industry were transferred to "Nonferrous rolling, drawing, and alloying," "Stamped and pressed metal products," "Metal barrels, kegs, drums, and pails," and "Primary metal industries, n.e.c."
Foundries, nonferrous	3491, 344P	Nonferrous foundries	336	Nonferrous forgings were transferred to "Primary metal industries, n.e.c."
Nonferrous basic shapes and forms	342, 343	Nonferrous secondary smelting and refining	334	New industry, broken out of "Nonferrous basic shapes and forms."
		Nonferrous rolling, drawing, and alloying	335	New industry, broken out of "Nonferrous basic shapes and forms"; also includes rolling, drawing, and alloying of aluminum and magnesium, transferred from "Aluminum and magnesium products."
Primary smelting and refining	341	Nonferrous primary smelting and refining	333	No change. (Data compiled by Bureau of Mines, U. S. Department of the Interior.)
Watches, clocks, jewelry, and silverware	345, 346	Watches and clocks	387	New industry, broken out and transferred to "Instruments and related products" (Group 38). Time clocks and time stamps were transferred to "Commercial and household machinery" (Group 35).
		Jewelry, silverware, and plated ware	391	New industry, broken out and transferred to "Miscellaneous manufacturing industries" (Group 39).
Nonferrous metal products, n. e. c.	348, 3492–3494, 3499	No comparable industry	----------	Parts of industry transferred to "Primary metal industries, n. e. c.," "Fabricated metal products, n. e. c.," "Stamped and pressed metal products," "Metal barrels, kegs, drums, and pails," and "Miscellaneous nonmetallic mineral products" (Group 32).
None	----------	Primary metal industries, n. e. c.	3399P	New industry, includes: nonferrous forgings, flakes and powders, and other primary nonferrous metal products, not elsewhere classified, transferred from "Foundries, nonferrous"; "Nonferrous metal products, n. e. c;" and from "Aluminum and magnesium products"; primary iron and steel products, not elsewhere classified, and annealing and heat treating of steel for the trade, transferred from "Iron and steel products, n. e. c."
None	----------	Fabricated metal products, n. e. c.	347, 3492, 3496–3499	New industry, includes: lighting fixtures, collapsible tubes, gold, silver, tin, aluminum, and other foil, and other fabricated nonferrous metal products, transferred from "Nonferrous metal products, n. e. c."; safes, vaults, and other fabricated iron and steel products, transferred from "Iron and steel products, n. e. c."

Leather and leather products	31	Same	31	**No change.**
Boots and shoes, not rubber	313, 314	Footwear (except rubber)	314	Boot and shoe cut stock and findings broken out as new industry.
		Boot and shoe cut stock and findings	313	
Leather	311, 312	Leather tanning and finishing	311	Industrial leather belting and packing was transferred to "Miscellaneous leather products."
Leather products, n. e. c	315, 316, 317, 319	Miscellaneous leather products	312, 315, 316, 317, 319	Includes industrial leather belting and packing, transferred from "Leather."
Lumber and timber basic products	24	**Lumber and wood products (except furniture)**	24	**Includes wooden containers and miscellaneous wood products, transferred from "Furniture and finished lumber products."**
Logging	241	Same	241	No change.
Millwork, structural	2431P	Millwork and structural wood products	2431, 2433	Includes unfinished wood molding, transferred from "Planing mills."
Planing mills	2431P	Same	2421P	Unfinished wood molding was transferred to "Millwork and structural wood products."
Plywood mills	2432	Same	2432	No change.
Sawmills	2421P, 2423, 2424, 2429	Sawmills	2421P	Shingle, cooperage stock, and other special-product sawmills were transferred to new industry, which also includes excelsior mills, transferred from "Miscellaneous wood products, n. e. c."
		Miscellaneous special-products sawmills	2423–2425, 2429	
Saw and planing mills, integrated	2421P	Same	2421P	No change.
Veneer mills	2422	Same	2422	No change.
Machinery, except electric	35	**Machinery (except electrical)**	35	**Includes several products transferred from other industries (see below). Mechanical measuring and controlling instruments were transferred to "Instruments and related products" (Group 38).**
Agricultural machinery and tractors	352	Same	352	Includes brooders and incubators, transferred from "Miscellaneous wood products, n. e. c.," and from "Heating equipment, n. e. c." Industrial tractors were transferred to "Miscellaneous general industrial machinery."
Bearings, ball and roller	3566P	Ball and roller bearings	3593	No change.
Commercial and household machinery	357, 358	Same	357, 358	Includes vacuum cleaners, transferred from "Electrical appliances" (Group 36); measuring and dispensing pumps, transferred from "Pumps and compressors"; time-clocks and time stamps, transferred from "Watches and clocks" (Group 34).
Construction and mining machinery	353	Same	353	No change.
Elevators, escalators, and conveyors	3562	Same	3562, 3563	Includes overhead traveling cranes, transferred from "General industrial machinery and equipment, n. e. c."
Engines and turbines	351	Same	351	Includes military tank engines, transferred from "Ordnance and accessories."
Fabricated pipe and fittings	3569P	Same	3592	No change.
Food-products machinery	3551	Same	3551	No change.
General industrial machinery and equipment, n. e. c.	3563, 3564, 3567, 3569P	Miscellaneous general industrial machinery.	3564, 3565, 3567–3569	Includes electric industrial furnaces, transferred from "Electrical equipment for industrial use" (Group 36); industrial tractors, transferred from "Agricultural machinery and tractors." Valves and valve parts (other than plumbers' and steam valves) were transferred to "Valves and fittings"; overhead traveling cranes were transferred to "Elevators, escalators, and conveyors"; Blowtorches, air brakes, calking guns, carburators, pistons and piston rings were transferred to "Machine shops, general."
General machine shops (jobbing and repair)	3569P	Machine shops, general	3599	Includes blowtorches, air brakes, calking guns, carburetors, pistons and piston rings, transferred from "General industrial machinery and equipment, n. e. c."
Mechanical measuring and controlling instruments.	3565, 3911P	Same	382	Industry transferred to "Instruments and related products" (Group 38). Includes thermostats, temperature control devices, gauges and regulators, transferred from "Steam fittings and apparatus" (Group 33).
Mechanical power transmission equipment, except ball and roller bearings.	3566P	Same	3566	No change.
Metalworking machinery	354	Same	354	No change.
Pumps and compressors	3561	Same	3561	Measuring and dispensing pumps were transferred to "Commercial and household machinery."
Special-industry machinery, n. e. c	3553–3555, 3559	Miscellaneous special-industry machinery	3553–3555, 3559	No change.
Textile machinery	3552	Same	3552	No change.
None		Valves and fittings	3591	New industry: includes valves and valve parts (other than plumbers' and steam valves), transferred from "General industrial machinery and equipment, n. e. c."; steam valves, fittings, and specialties, transferred from "Steam fittings and apparatus" (Group 33).
Nonferrous metals and their products (see above).	34	**Primary metal industries**	33	**Combined with "Iron and steel and their products" and regrouped (see above).**
		Fabricated metal industries	34	
Ordnance and accessories	19	**Same**	19	**Military tank engines were transferred to "Engines and turbines."**
Paper and allied products	26	**Same**	26	**Only minor changes (see below).**
Envelopes	264	Same	265	No change.
Paper boxes and containers	266	Paperboard containers and boxes	267	No change.
Paper and pulp	261, 262	Pulp, paper, and paperboard mills	261	No change.
Paper products, n. e. c	263, 265, 269	Miscellaneous paper and allied products	264, 266, 269	Includes cellophane and pliofilm bags, transferred from "Fabricated plastics products."

See footnotes at end of table.

TABLE F.—Changes in industry classification for work-injury survey (manufacturing industries)—Continued

Former industry title [1]	S. I. C. code (1942 edition) [2]	New comparable industry title [1]	S. I. C. code (1945 edition) [2]	Changes in industry definition
Printing and publishing	27	**Printing, publishing, and allied industries**	27	**No change.**
Book and job printing	273, 274, 275, 276, 277, 279	Miscellaneous printing and publishing	273, 274, 275, 276, 277, 279	No change.
Bookbinding	278	Bookbinding and related products	278	No change.
News and periodicals	271, 272	Newspapers and periodicals	271, 272	No change.
Rubber products	30	**Same**	30	**Only minor changes (see below).**
Rubber boots and shoes	302	Rubber footwear	302	No change.
Rubber tires and tubes	301	Tires and inner tubes	301	No change.
Rubber products, n. e. c	303, 304, 305, 309	Miscellaneous rubber products	303, 309	Rubber dolls were transferred to "Miscellaneous manufacturing" (Group 39).
Stone, clay, and glass products	32	**Same**	32	**Only minor changes (see below):**
Cement mills (excluding quarries)	324	Same	324	No change. (Data compiled by Bureau of Mines, Department of the Interior.)
Clay products, structural	325	Structural clay products	325	No change.
Concrete, gypsum, and plaster products	3271–3274	Concrete, gypsum, and mineral wool	3271, 3272, 3275	Includes glass wool and fiberglass insulation, transferred from "Glass"; Mastic composition floor covering was transferred to "Paving and roofing materials"; (Group 29); Asphalt floor tile, to "Miscellaneous nonmetallic mineral products."
Cut stone and cut-stone products	328	Cut-stone and stone products	328	No change.
Glass	321, 322, 323	Glass and glass products	321, 322, 323	Fiberglass insulation and glass wool were transferred to "Concrete, gypsum, and mineral wool."
Pottery and related products	326	Same	326	No change.
Stone, clay, and glass products, n. e. c	329	Miscellaneous nonmetallic mineral products.	329	Includes gaskets regardless of materials, transferred from various industries; and asphalt floor tile, transferred from "Concrete, gypsum, and plaster products."
None		Lime	3274	Includes only lime kilns, formerly included with lime quarries under mining group. (Data compiled by Bureau of Mines, Department of the Interior.)
Textile and textile mill products	22	**Textile-mill products**	22	**No change.**
Carpets, rugs, and other floor coverings	226	Same	(3)	No change.
Cordage and twine	2298	Same	(3)	No change.
Cotton yarn and textiles	221	Same	(3)	No change.
Dyeing and finishing textiles	2235, 225	Same	(3)	No change.
Hats, except cloth and millinery	227	Same	(3)	No change.
Knit goods	224	Same	(3)	No change.
Rayon, other synthetic, and silk textiles	222	Same	(3)	No change.
Woolen and worsted textiles	2231–2234	Same	(3)	No change.
Miscellaneous textile goods, n. e. c	2291–2297, 2299	Miscellaneous textile goods	(3)	No change.
Transportation equipment	37, 38	**Same**	37	**No change.**
Aircraft	3721	Same	3721	Parachutes were transferred to "Aircraft parts."
Aircraft parts	3722, 3723, 3729	Same	3722, 3723, 3729	Includes parachutes, transferred from "Aircraft."
Boat building and repairing	3732	Same	3732	No change.
Motor vehicles	381, 382, 384	Motor vehicles, bodies, and trailers	3711–3713, 3715, 3716	No change.
Motor-vehicle parts	383	Motor vehicle parts and accessories	3714	No change.
Railroad equipment	371	Same	374	No change.
Shipbuilding and repairing	3731	Same	3731	No change.
Transportation equipment, n. e. c	374, 379	Miscellaneous transportation equipment	375, 379	No change.
Miscellaneous manufacturing	21, 39, 2922	**Tobacco manufactures**	21	**New industry groups set up and industries regrouped.**
		Instruments and related products	38	
		Miscellaneous manufacturing industries	39	
Brooms and brushes	392	Same	3981	No change.
Coke ovens	292	Same	293	No change; industry transferred to "Products of petroleum and coal" (Group 29). (Data compiled by Bureau of Mines, U. S. Department of the Interior.)
Fabricated plastics products	398	Same	397	Cellophane bags were transferred to "Miscellaneous paper and allied products."
Optical and ophthalmic goods	3913, 3914	Optical instruments and lenses	383	Two new industries, broken out of former industry, and transferred to "Instruments and related products" (Group 38).
		Ophthalmic goods	385	
Photographic apparatus and materials	3912	Photographic equipment and supplies	386	No change; industry transferred to "Instruments and related products" (Group 38).
Professional and scientific instruments and supplies.	3915–3917, 3911P	Scientific instruments	381	Two new industries, broken out of former industry and transferred to "Instruments and related products" (Group 38).
		Medical instruments and supplies	384	

Tobacco products	211, 212, 213, 214	Tobacco manufactures	211, 212, 213, 214	No change; industry transferred to separate group, "Tobacco manufactures." (Group 21).
Miscellaneous manufacturing, n. e. c	393, 394, 395, 396, 397, 399	Miscellaneous manufacturing	393, 394, 395, 396, 3982–3987, 399	Includes cork products and matches, transferred from "Miscellaneous wood products"; fireworks and pyrotechnics, from "Explosives"; candles, from "Chemical products, n. e. c."; and rubber dolls, from "Rubber products, n. e. c."

[1] The abbreviations n. e. c., used in certain industry titles, indicate "not elsewhere classified."

[2] The code numbers refer to those used in the Standard Industrial Classification Manual, vol 1. Manufacturing Industries, prepared by the Division of Statistical Standards, U. S. Bureau of the Budget. The 2-digit codes refer to major industry groups. The code numbers shown for individual ndustries refer to the 3-digit or 4-digit industry codes of the S. I. C. included in the industry as defined or purposes of compiling injury rates. Where several 3-digit industries are included under one title, the respective code numbers are shown. Where a series of 4-digit industries are combined, a dash (—) is used to show that all codes in the 3-digit classification from the first to the last indicated are included—for example, 2831–2833 indicates that industries 2831, 2832, and 2833 are included. The letter P following a code number, indicates that only part of that S. I. C. industry is included.

[3] Industry classifications for work-injury surveys in this group were not changed, and are still based on the earlier edition of the Standard Industrial Classification Manual.

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